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JULY
1949

JOURNAL OF THE WIRELESS INSTITUTE OF AUSTRALIA

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EDITORIAL



BAND-PLANNING

Since the re-issue of licences after the War, one of the greatest problems confronting Amateur Societies throughout the world has been that of planning the sub-division of the Amateur Bands between telegraphy and telephony. This problem has been brought about by various reasons—the re-activated interest in Amateur Radio by many old-timers, new Amateurs and the constriction of the bands. In Australia, no less than elsewhere, we have been well aware of these facts and realised that something must be done, either voluntary or compulsorily, to alleviate the congestion. We intend in these Editorials to convey to you the over-seas "picture" as well as our own.

In Great Britain and Europe this condition is aggravated to a greater extent than ever known in Australia, where our ideal geographic location isolates us from large masses of Amateurs. Realising the parlous state of the bands, the Radio Society of Great Britain took immediate steps to appoint a Codes of Practice Committee to investigate and report on the matter. After much preliminary work, the Society took a National poll of Amateurs in February, 1947, but unfortunately the response was poor and no definite opinion could be deduced. Not to be dismayed, the Society, through its Committee, produced a tentative plan some twelve months later and circulated all European Societies and Empire Societies of the B.E.R.U. for comments. This bore fruit and having produced from this poll an amended plan, again circulated all Town Groups of the R.S.G.B. to ensure that a complete cross-section of active Amateurs' opinion was obtained. On these answers the final plan was formulated—its implementation to be on a voluntary basis and to come into operation immediately.

Every attempt was made to keep the plan simple, while having in mind existing conditions of harmonic relationship of the bands, ease of

frequency measurement, and the frequency divisions in other parts of the world—in all, a comprehensive and carefully-calculated plan. The well-tried practice of U.S.A. in reserving sections in each band for exclusive telegraphy use has been incorporated with the exception of the 3.5 Mc. band. This may seem at first sight unfair to the telephony stations, but on closer inspection this is not so. Except for c.w. contest periods, telegraphy stations remain much within their own "confines" and show no inclination to compete with telephony stations in the "telephony" portions of the bands—thus preserving that elasticity which is desirable under any voluntary agreement.

The plan which the R.S.G.B. has asked all its members and European Societies to adopt, on a voluntary basis, is as follows:—

3500-3600 Kc. c.w. only
3600-3635 Kc. phone only
3685-3800 Kc. phone only
7000-7050 Kc. c.w. only
7050-7300 Kc. c.w. and phone
14000-14150 Kc. c.w. only
14150-14400 Kc. c.w. and phone
28000-28200 Kc. c.w. only
28200-30000 Kc. c.w. and phone.

This plan will later be modified as follows, when the final Atlantic City allocations are made:—

3500-3600 Kc. c.w. only
3600-3800 Kc. phone only
7000-7050 Kc. c.w. only
7050-7150 Kc. c.w. and phone
14000-14100 Kc. c.w. only
14100-14350 Kc. c.w. and phone
21000-21150 Kc. c.w. only
21150-21450 Kc. c.w. and phone
28000-28200 Kc. c.w. only
28200-29700 Kc. c.w. and phone.

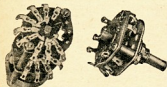
Next month, we will convey to you the proposals and steps of other countries to solve this vexatious problem and still meet with the goodwill of both c.w. and phone operators alike.

—W.T.S.M.

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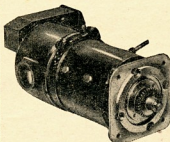
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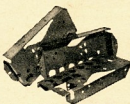
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Single Sideband Suppressed Carrier

BY L. W. EDWARDS,* VK7LE

Although single sideband suppressed carrier systems are new to the Ham world, they are not new in the commercial sphere and circuits have been operating for many years in England and America. Then there are the carrier telephone systems used by the P.M.G.'s. Department for their trunk lines which are single sideband suppressed carrier systems on wires.

But now to facts and figures. To understand fully the principles involved we must first look to the theory of the amplitude modulated carrier where we have sidebands extending either side of the steady carrier frequency. The a.m. carrier and sideband covers a portion of the frequency spectrum depending on the highest modulating frequency. If modulated with 5 Kc. as the highest audio frequency, then the portion of the band covered will be 10 Kc., or 5 Kc. either side of the carrier frequency. At 100% modulation the total average power in both sidebands is 50% of the carrier power—that is each sideband is 25% of the carrier power, the extra power under modulation is of course supplied by the modulators.

To understand how modulation takes place it is probably easiest to imagine it as a heterodyne process, which in fact it is. If we have a carrier frequency of 7 Mc. appearing in the plate circuit of our final amplifier and we inject an audio frequency of 1,000 cycles from our modulators, then the two frequencies beat together to produce two new frequencies, the carrier plus 1,000 cycles, or 7,001 Kc., and the carrier minus 1,000 cycles, or 6,999 Kc. Then we have four separate frequencies appearing in our final tank circuit, 6,999 Kc., 7,000 Kc., 7,001 Kc. and 1,000 cycles. The three radio frequencies are passed to the aerial and radiated while

the 1,000 cycles is shorted out by the tank. In the receiver the process is reversed and the incoming carrier and sidebands are impressed upon the detector where they beat together to produce the original 1,000 cycles.

If we look closely at this process we can readily see that it is only necessary to have the carrier and one sideband to produce the original 1,000 cycles, therefore we can do away completely with one sideband without affecting the intelligibility. This in fact is one method of narrowing the band width used by a transmitter, and actually cuts the band width in half. Now suppose we suppress the carrier completely and transmit only one sideband. This sideband alone cannot convey any intelligence because it has no carrier to beat with in the receiver detector, but if we supply at the receiver a carrier of the same frequency as the suppressed carrier, such as from our b.f.o., v.f.o. or frequency meter, then this local carrier and our incoming sideband beat together and produce the original modulation.

Now, you will ask, what possible benefit can we get from this rather involved process?

Well, returning to the picture of what our normal a.m. signal looks like, we have a carrier of a single steady frequency with sidebands consisting of a number of separate frequencies extending either side. If our highest modulating frequency is 3 Kc., then our signal takes up 6 Kc. of the band and this limits the number of stations operating on a certain band without interference. For instance, the 80 metre band is 300 Kc. wide, which means that 50 stations may operate without interference, but suppose we suppress the carrier and one sideband, then our signal only takes up 3 Kc. of the band and 100 stations may now operate. In actual practice, of course, stations may operate closer together on the band, but where normal

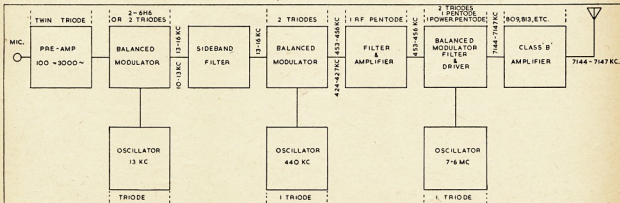
a.m. transmission is used, the QRM becomes worse as the stations operate more closely. If all stations were operating on s.s.c., heterodyne QRM would be entirely eliminated because no carriers are transmitted to cause steady heterodynes, and a signal is only emitted when the operator speaks. In actual practice s.s.c. stations may operate within a few hundred cycles of each other as only the signal to which a local carrier is supplied will be readable—the other signal remaining as unintelligible monkey chatter in the background.

Now look at the final amplifier of your transmitter. If the carrier is 100% modulated with a sine wave, the total average power in the sidebands is half the carrier power. Thus if our carrier power is 100 watts, our sidebands will total 50 watts—25 watts in each sideband or a total power radiated of 150 watts. Now suppress the carrier and one sideband and we have remaining one 25 watt sideband, but the final amplifier is obviously capable of handling 150 watts.

So it appears that it should be possible to increase the remaining 25 watt sideband to 150 watts, which is the equivalent sideband power for a 600 watt carrier! However, this is assuming the final amplifier is running Class C as it does with normal a.m. transmitters, but with the s.s.c. transmitter we must run Class B linear or Class A because the system will not stand the distortion introduced by a Class C amplifier. Therefore we have a slight loss in efficiency, the Class B amplifier being approximately 10 or 15% less efficient than the Class C.

Actually the Class B amplifier does not have to be adjusted to carrier conditions as there is no carrier, it will operate as a normal Class B audio amplifier except that only one tube is necessary. However even with this loss

* Strickland Avenue, South Hobart.



Block Diagram of a Filter Type Single Sideband Suppressed Carrier Transmitter. Receiver parts and technique is used to the input of the Final Amplifier. Excluding the Final Amplifier, the Power Supply necessary is 300 Volts at 120 Ma.

in efficiency the power gain over the normal a.m. transmitter is still 6 db or four times. These figures are based on sine wave modulation, whereas with speech modulation the average voice waveform contains only about half as much power as a sine wave of the same peak amplitude—this further increases our power gain to 9 db or eight times. Then again no operator speaks at maximum intensity all the time.

In our normal a.m. final amplifier the carrier causes most of the heating or plate dissipation, but since with s.s.c. there is no carrier, we may increase the allowable dissipation, and from this fact our power gain is increased further to approximately 12 db or 16 times! Now this single sideband suppressed carrier business starts to look rather attractive.

Now from the economy point of view, a normal a.m. transmitter of 100 watts carrier power requires an input of about 130 watts to the final amplifier, plus about 80 watts input to the modulators, a total of 210 watts, neglecting the low level stages. In the s.s.c. transmitter we do away with high power modulators and therefore 80 watts of input power, also since there is only input to the final r.f. amplifier when the operator speaks, the saving in power is quite considerable. Actually with an average input of 100 watts to the final Class B amplifier we can get approximately 65 watts of sideband out, or the equivalent of nearly a kilowatt of normal a.m. phone!

Transmitting only one sideband, the receiver bandwidth need only be half as great as for double sideband, and this gives an immediate 3 db increase in signal to noise since reducing the

bandwidth by half increases the signal to noise ratio by two. There is also less trouble with selective fading—the kind where the sidebands and carrier come in out of phase—since we have no carrier and only one sideband we can expect almost complete freedom from this effect.

ADVANTAGES

Now just looking back over the advantages to be gained by using single sideband suppressed carrier:—

1. Reduced bandwidth—thus allowing more stations to operate on the band and giving a better signal to noise ratio.
2. No carriers—therefore no heterodyne QRM.
3. An approximate power gain of 16 times the normal double sideband rig—all the power goes into the single sideband.
4. More economical—very much lower power consumption for a greater effective output than the normal a.m. rig.
5. Almost complete absence of selective fading.
6. A substantial reduction in QRM and QRN.

Almost all the above advantages have been gained in the tests carried out so far, but all of them won't be evident unless all phone stations are using the system. However, it is certainly a step in the right direction as a solution to the present crowded conditions on the various bands.

Acknowledgements go to "QST" for much of the information contained in this article, and those interested are recommended to read the January, 1948, issue.

DISADVANTAGES

There are, of course, some disadvantages.

1. The equipment to produce a single sideband suppressed carrier signal is a little more complicated and more care is needed in the construction and adjustment of the rig. The main snag is the filter used to chop off one sideband, but this is not quite so difficult as it might appear.
2. Tuning in the signal with a normal receiver is inclined to be a rather touchy business and a voltage regulator on the converter and b.f.o. is almost a necessity as the local carrier which must be supplied at the receiver should be kept within plus or minus 50 cycles of the original suppressed carrier.

There are two generally known methods of obtaining a single sideband suppressed carrier signal—one system uses a filter at a low frequency to chop off one sideband, and balanced modulators to suppress the carrier. The other system uses a phase shift network to cancel out one sideband and carrier.

Of the two systems the filter type gives true carrier and sideband suppression, while the other system of phasing is quite critical in adjustment and does not completely suppress the carrier or unwanted sideband. It may also create undesirable sidebands which may radiate outside the band.

An article on the design and construction of a filter type single sideband suppressed carrier transmitter for Australian conditions is in preparation for submission to "A.R." at some future date.

Receiver Base Mounting

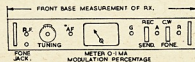
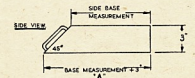
BY LEE HITCHINS,* VK6HC

Recent editions of "QST" have contained advertisements on tilt bases for standard communication receivers. These bases elevate the receiver a few inches to a more convenient height and place the receiver panel on a slight angle away from the operator. It also enables one to install control switches (send, receive, etc.) on the new small panel provided below the receiver panel—so that all station controls are grouped together right at one's finger tips.

At this QTH the writer had no desire to tilt the receiver, as an S9'er roosts on top of it, and it seemed to me that the transmitter controls would now be as hard to handle as the bottom row of the receiver had been before being elevated.

A modified version was thought up to elevate the receiver in a normal position and provide convenient control panel space for switching. A chassis, similar to an amplifier chassis, is used. The height is three inches and the

length and depth depend on the receiver in use. Viewing the base from side on (see sketch A), the top length is three inches shorter than the base length—giving a sloping front panel at an angle of forty-five degrees. The base is constructed of heavy gauge iron and



crackled to match the particular receiver.

On the sloping front panel provided, under the now elevated vertical receiver panel, can be placed controls to give finger tip control over the rig. The suggested layout is in sketch B. Naturally the set-up can be adapted to local demands and a small c.r.o., line meter or any other indicator can be used in the space available.

The meter suggested here is a modulation percentage indicator, and its associated controls—two toggle switches, a variable condenser and a phone monitor jack—are on the left. For details of this device, which consists mainly of two germanium crystals and a meter, see the 1948 A.R.R.L. Handbook, page 478. To the right of the meter are two switches and three bezels. The switches are: receive (green bezel) or transmit (amber or red), and c.w. (amber) or phone (red). If desired the base can be given a slightly more professional appearance by the addition of two chrome handles, one on either end of the panel as shown.

* Sorrento Street, North Beach, W. Aus.

IONOSPHERIC PREDICTIONS FOR THE AMATEUR BANDS

JULY, 1949

The accompanying charts have been prepared by the Ionospheric Prediction Service of the Commonwealth Observatory. The first set of the series was published in the November, 1948, issue of this magazine, together with an article explaining the nature of the forecasts and how to use them. Nine of the charts, prefixed by the letter "C" for Canberra, refer to forecasts for the South-Eastern Australian States. The remainder, prefixed by the letter "P" for Perth, are for Western Australia.

The Canberra charts refer to the following world zones:—

Zone	Region	Terminal
1	Western Europe	London
2	Mediterranean	Cairo
3	N.-West America	San Francisco
3a	N.-East America	New York
4	Central America	Barbados
5	South Africa	Johannesburg
6	Far East	Manila

The forecasts have actually been prepared for point-to-point circuits between Canberra and the overseas terminals mentioned in the above table. It is, however, to be expected that the charts will provide an approximate indication of ionospheric conditions for all Amateur contacts from South Eastern Australia to the various world zones.

The Perth charts are similar to those based on Canberra. No forecasts are given from Perth to Zones 22 and 24 for the current month, as chart P-22 would be essentially similar to chart P-21, while chart P-24 might be unreliable due to auroral activity in high northern latitudes.

USE OF CHARTS

All that is necessary in using the charts is to select a time (G.M.T.) during which a specified Amateur band frequency is below the maximum usable frequency (m.u.f.) of the F region of the ionosphere but above the lowest useful frequency (l.u.f.) for the desired contact. In two cases, Zones 1 and 3a it is necessary to consult both the short-route (S.R.) chart and the following long-route (L.R.) chart.

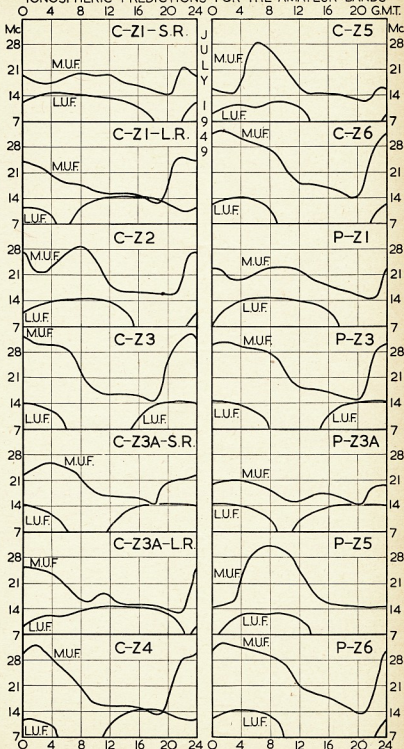
QUIZ

The Prediction Service welcomes comments on the accuracy of its predictions. In particular, answers to the following questions on the Perth-London circuit would be useful:—

1. Were best conditions experienced on 7 Mc. for a few hours before midnight G.M.T.?
2. Did the 7 Mc. band regularly become workable at about 1700 hours G.M.T., and unworkable at about midnight G.M.T.?
3. What conditions were experienced on 14 Mc., particularly around 0800 hours and around 2200 hours G.M.T.?

Answers to the Quiz should be sent to the W.I.A. and should, if possible, refer to consistent results obtained on the majority of days in the month.

IONOSPHERIC PREDICTIONS FOR THE AMATEUR BANDS



A Universal Speech Amplifier

BY DR. R. L. DOUGLAS,* VK2ON

The circuit shown is that of a speech amplifier which has performed satisfactorily at the writer's station. It was first constructed in 1939 and has been gradually modified to its present form. The circuit is straight forward enough, embodying two pentode 6J7Gs and one triode-connected 6J7G. The 6H6G peak-limiter follows the usual simple circuit.

CATHODE BY-PASS CONDENSERS

Both paper and electrolytic condensers are connected across the three cathode resistors. The former are of small size and are of value in reducing instability due to r.f. from the final amplifier. The potentiometer in series with the 25 μ F. in the second stage acts as a very efficient bass-limiter. This is of major importance in narrow-band f.m. transmissions. It is found that the voice loses none of its clarity or intelligibility by removing the bass frequencies and the tendency to distortion on f.m. is markedly improved.

PEAK LIMITER

This portion of the circuit is as efficient as it is simple. The usual circuits employ a choke filter following the 6H6, but none was found necessary, in fact the quality was better without this. The 0.0005 uF. shown does, of course, filter off the high frequency harmonics generated.

The two 3,000 ohm resistors provide a potential of 6v+ and 6v- with respect to the 6J7G grid. When clipping occurs, the maximum audio voltage across the 0.1 megohm potentiometer is 6v. This, after amplification by the 6J7G triode, becomes 72v. which in the present transmitter is impressed on the grids of a series modulator through a 3:1 audio transformer.

* Baan Baan Street, Dapto, N.S.W.

A compact speech amplifier located on the operating table has much to recommend it, as it enables the microphone cable to be kept as short as possible, thereby eliminating one very common source of r.f. pick-up.

The chief advantage of the peak-limiter appears to be that, once adjusted correctly, it is impossible to over-modulate and also a continuous high level of modulation is obtained despite variations in loudness of the voice.

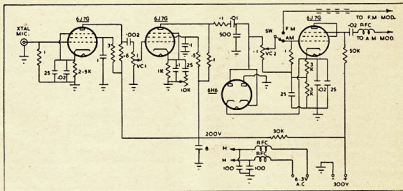
It is necessary to have two volume controls with any peak-limiting device. The setting of VC1 determines the amount of clipping and VC2 determines the depth of maximum modulation. Usually VC1 is advanced until the

limiter is working. Then VC2 is advanced until there is evidence of full modulation, such as a 0.3% increase in p.a. plate current. It is helpful to have the volume controls calibrated in db levels. This may be done fairly simply with a magic-eye type a.c. bridge.

HEATER LEAD CHOKES

The writer found these to be the last word in removing r.f. instability from the speech amplifier. The chokes do not lower the voltage supplied by more than 0.2v. and each one consists of 50 turns of 18 gauge enamel wire on a $\frac{3}{8}$ " former, $2\frac{1}{4}$ " long. With these chokes it is possible to use the same filament transformer for speech amplifier and r.f. final amplifier even on 28 megacycles.

A too high value of screen voltage on the first 6J7G sometimes causes distortion. It may be necessary to experiment with an additional resistor from the screen to earth to obtain the correct screen voltage.



Another System of a Simple Speech Clipper

BY C. GIBSON,† VK3FO

When listening to signals on the Amateur bands, one is struck by the number of stations that do over-modulate and perhaps are not aware of the position. Unless the signal is monitored by a modulation checker or a c.r.o., a position arises where over-modulation can happen in the speech waveform, where the presence of frequently recurring high intensity peaks of very short duration occur. These peaks will cause over-modulation on loud passages or syllables, if they exceed about 30%. These sharp peaks make the signal a little difficult to copy and do not add to the intelligibility of the signal, but if a speech clipper is used a very understandable signal will be obtained.

This can be brought about simply by increasing the gain of the speech amplifier until the average level of modulation on loud syllables approaches about 90%. This is equivalent to increasing the power by nearly 10 times

—not a bad gain. However the clipping, when accomplished in this manner, will produce higher order sidebands—or splatter—a most undesirable feature, sometimes occupying a considerable

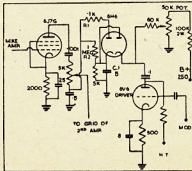


Plate and screen of speech amp. and driver grid are not shown in above.

slice of the band, and QRM is bad enough now.

All these undesirable features in a transmitter can be eliminated by the inclusion of a simple speech clipper. The circuit calls for a 6H6, potentiometer, and a few odd resistors and condensers. At first when it is wired into the speech amplifier it may not appear to work, but by experimenting with R1, R2, and C1 the desired results will be obtained. R1 may be decreased as low as 25,000 and R2 to 50,000. C1 may be 0.1 μ F, it all depends on the circuit and voltages in the modulator.

The modulator used here is Class AB2 807s driven by a 6V6 as a triode, preceded by a 6J7 mike amplifier into another 6J7. Voltage on the plates of the 807s is 500 volts and the screens 250 volts. The clipper was thoroughly tried out and checked by a c.r.o., the results obtained being well worth the trouble. So if you want a good simple clipper, cheap and very easy to install, here it is.

A Versatile Measuring Instrument

BY G. L. F. SMITH,* VK3FR

In all branches of radio work, there is a continual demand for a means whereby the values of various types of components can be easily ascertained. These measurements, in the main, are those of resistance, capacity and inductance. Resistance can, of course, be very easily checked on any of the usual types of multimeters, whereas for capacity it is generally assumed that a complicated piece of apparatus is required.

Probably most of us, at one time or another, have been browsing through one of our favourite text books, and have noticed a circuit very similar to that in Figure 1, and on reading the accompanying text have discovered that the circuit is really supposed to be that of an instrument intended to measure C and R.

Glancing at the circuit it appears so simple that, for this reason, we have been deterred from constructing such a piece of apparatus on the grounds that there must be a catch in it somewhere. Yes, there is a catch, but it is only one of calibration, which most constructors will have no difficulty in overcoming.

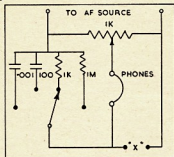
On studying the diagram, it can quickly be seen that it is only a very elementary type of bridge circuit, using headphones as the means of indication, and some source of a.c. as the audio signal, but more about that later.

The ratio arms of the bridge are provided by the potentiometer with the moving arm as the common point, while for the other two arms of the bridge we have the standard values of C, or R, whichever is required to be checked, and across the points marked "X" are placed the unknown values to be checked.

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Generally with such instruments, there is the necessity for mathematical calculations before we can arrive at an answer to our problem, but once this instrument has been completed and calibrated, the values can be taken directly from the dial.

With the appropriate standard value switched into circuit, and the unknown quantity connected across the points "X," the potentiometer knob is turned until the audio signal in the headphones disappears. This point is somewhat critical but quite definite, so no difficulty should be experienced in locating it.



CONSTRUCTION The circuit as built up for the measurement of capacity and resistance is shown in the diagram. Inductance ranges may be added to suit the constructor's particular requirements. These standard values may be brought into circuit by means of a switch, or banana sockets and a wandering banana plug can be used.

The potentiometer value is not very critical but, if possible a linear job should be obtained, although a tapered type will do the job.

The source of audio signal for operation of the bridge can be left to the individual builder to decide upon. In the original, from which the circuit is drawn, a polarised buzzer was used, but when it is re-built, a valve oscillator will be pressed into service as it was found that the buzzer operating was distracting, and as a result, the null point was a little difficult to decide upon. Apart from that, the buzzer does a satisfactory job and in a sound-proof box would be inaudible.

CALIBRATION If the builder has access to a calibrated bridge, he can first check the sizes of as many values of components as possible, and then mark his own instrument's dial at the point where the audio signal disappears when the knob is rotated. Lacking these facilities, obtain as many as possible of each particular value, and by averaging out the points on the dial a fairly accurate result can be obtained. The usual run of parts available have a tolerance of up to 20%, so for any general tests this degree of accuracy will suffice, but it will be found that, if care is taken, this instrument will give much closer tolerances than that.

The dial can be directly calibrated or a series of graphs can be drawn from the results obtained. With the values shown, it will be possible to check the value of all popular parts quickly and with accuracy.

In conclusion, it should be realised that only by making a perfectly rigid mechanical job, and taking every care with its calibration, can any sort of satisfactory results be obtained. Building well, then skipping on the calibration, or, vice versa, is only a waste of time and materials. Do both jobs well and the finished article will re-pay you for that extra care many times over.

HINTS & KINKS

SELF-POWERED BIAS

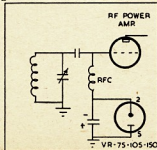
There may be some of you who looked at the article in "QST" (Dec., 1948) by W5WVQ, and who thought like myself, "what a idea if it works." As there may be others who do not take "QST," and want some simple idea to bias the final tube so that they can key the buffer stage—here it is, simplicity itself.

In the writer's case, with an 813 in the final, I wanted something simple that would retain a fixed bias so that I could key the 807 buffer stage; it's much easier to eliminate the clicks keying a stage pulling around the 35 Ma. mark.

The VR tube is initially lighted by the grid driving voltage, and a charge is thus placed on the condenser. When excitation is removed, as when the key is up, the VR tube goes out and the

charge that remains in the condenser keeps the amplifier cut off.

The only precaution needed is to switch the buffer stage on first, this charges the condenser. From a test made here, the drive was switched off and the final power supply switched on, the plate current of the final was held at cut-off and remained so for a period of ten minutes, just how much longer it would have held the final in



this condition I do not know, but I was personally satisfied with the ten minute test made.

The experts suggest that a paper condenser be used in preference to an electrolytic, in my own case I used an 8 uF, paper condenser 500 volt working, and a VR150.—VK5MD.

SIMPLE UNIVERSAL CRYSTAL HOLDER

A useful crystal holder for the new (or old) rig can be made very simply from three insulated pushdown spring type terminals,

mounted and connected as shown in the accompanying diagram. This holder will take crystals of both $\frac{1}{4}$ " and $\frac{1}{2}$ " pin spacing, and is simple, cheap, and effective. Old hardware terminals will do at a pinch.—VK3ASG.



"RADIO VALVE PRACTICE"

Published by the British Radio Valve Manufacturers' Association.

This little booklet makes worthwhile reading for Amateurs who are interested in getting the best performance and life out of their valves. The following quotations from it should be of interest and will show the type of information contained therein:—

"It is not safe to assume that one maximum rating (e.g. the anode voltage) may be exceeded provided a corresponding reduction is made to some other rating (e.g. the anode current). Although this may be permissible in some instances, all maximum ratings are

not mutually compensating and some limits are absolute. For example, the peak current rating of mercury vapour rectifiers must not be exceeded, even though the applied voltage is reduced.

"When a frequency range is specified, the valve ratings apply only within this limitation. When receiving or transmitting valves are used at excessively high frequencies, appreciably above the maximum rating, the power dissipated in the lead-in wires due to resistance losses, and in the glass between the leads due to dielectric loss, may be sufficient to over-heat the wires or the glass, and either release gas into the valve or cause the glass to crack. Running the valve at a lower rating will reduce this possibility.

"Low heater or filament voltages are as much to be avoided as high voltages. The consistent emission from the cathode depends upon equilibrium between the evaporation of active material from the surface and its replacement from within. If the cathode temperature is excessive, evaporation will occur at a faster rate than replacement. If the cathode temperature is too low replacement will decrease more than evaporation. In either case the emission from the cathode will decline at an excessive rate.

"Valves should not (in general) be mounted base upwards. This method of mounting seriously affects the flow of air around the bulb. If the part of the valve on which the getter is deposited is over-heated gas will be released and the valve will go soft. If the pinch of the valve is over-heated, the inter-electrode capacities will change—particularly in the case of oscillators, frequency drift will result.

"If it is necessary to depart from vertical mounting, the plane of the filament of directly heated valves should be vertical. Similarly the plane of the major axis of the control grid of certain indirectly heated valves having high mutual conductance should be vertical." (Note to 522 users.—If you find the 832s don't last long and you've been using the set in an upright position, have a look which way the 832s are lying.—A.K.H.)

"Some valve holders incorporate floating contacts, the connections to which should be as flexible as possible. In holders for glass based valves this is particularly important, since the use of stiff wiring will destroy all the advantages provided by the float of the contacts and in extreme cases will hold the contacts permanently out of position and result in damage to valve bases.

"It is undesirable to use spare socket contacts as connecting points in the circuit wiring. In valves with glass bases this practice may adversely affect the valve characteristics by the application of potentials to pins which are not connected to any electrode but which project into the envelope.

"It is generally desirable to avoid a large potential difference between the heater and cathode. This potential should not normally exceed 150 volts, except with valves specially designed for a.c./d.c. operation or as cathode followers, etc. The insulation resistance between the heater and the cathode should not be included in r.f. circuits where frequency stability is required or in a.f. circuits followed by a high gain. If the heater cathode insulation is included in a tuned circuit, any alteration to the physical or electrical properties of the insulation will alter the frequencies to which the circuit is tuned, and if both r.f. and I.f. (mains frequency) voltages exist across the insulation, there is the risk of modulation hum, particularly in cathode coupled oscillators and the like.

"The practice of keying by opening the cathode circuit may result in a large potential difference between heater and cathode and should be avoided. If cathode keying is essential a resistance not exceeding 0.25 megohms should be connected between the heater and the cathode.

"It is undesirable in general, that keying should be carried out by opening the screen circuit whilst the normal anode and grid voltages are maintained. This particularly applies to all forms of tetrodes. If it is necessary to interrupt the anode current by open-circuiting the screen supply, the lowest practicable resistance should be permanently connected between the screen and the cathode.

"Valves should not be used in circuits in applications which result in appreciable suppressor grid current. It is therefore important that in the case of pentodes connected as triodes, the suppressor grid should be connected to the cathode rather than the anode."

The rest of the very practical information contained in this booklet should make it interesting and profitable reading for Amateurs.

— A. K. H.

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Philips, Holland, who supplied the equipment and undertook the technical arrangements for this demonstration, used two viewing screens each 4' 10" x 3' 3" and produced, for the benefit of the audience, a wonderful picture which showed beyond all doubt the enormous possibilities of television as an aid to medical training.

Newspaper and university representatives who witnessed the screening acclaimed the quality and value of this television demonstration which made European history and again evidenced the place held by Philips in the forefront of the technical field.

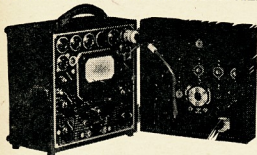
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AC3	Sikkim	KC6	Caroline Islands	UM8	Kirghiz
AC4	Tibet	KC6	Palau (Pelew) Islands	UN1	Karelo-Finnish Republic
AG2 (MF2)	Trieste	KG6	Marianas Islands (Guam)	UN1	Moldavia
AP	Pakistan	KG6	Bonin & Volcano-Is. (Iwo Jima)	UP2	Lithuania
AR8	Lebanon	KH6	Hawaiian Islands	UQ2	Latvia
C	China	KJ6	Johnston Island	UR2	Estonia
CE	Chile	KL7	Alaska	VE	Canada
CM, CO	Cuba	KM6	Midway Island	VK	Australia
CN	Morocco, French	KP4	Puerto Rico	VK1	Heard Island
CP	Bolivia	KP6	Jarvis Island and Palmyra Group	VK1	Macquarie Island
CR4	Cape Verde Islands	KR6	Ryukyu Islands (Okinawa)	VK9	New Guinea, Territory of
CR5	Guinea, Portuguese	KS4	Swan Island	VK9	Norfolk Island
CR6	Angola	KS6	Samoa, American	VK9	Papua Territory
CR7	Mozambique	KV4	Virgin Islands	VO	Newfoundland
CR8	Goa (Portuguese India)	KW6	Wake Islands	VO6	Labrador
CR9	Macau	KX6	Marshall Islands	VP1	Honduras
CR10	Timor, Portuguese	KZ5	Canal Zone	VP2	British
CT1	Portugal	LA	Norway	VP2	Leeward Islands
CT2	Azores Islands	LU	Argentina	VP3	Windward Islands
CT3	Madeira Islands	LX	Luxemburg	VP4	Guiana, British
CX	Uruguay	LZ	Bulgaria	VP5	Trinidad and Tobago
CZ	Monaco	MB9 (OE)	Austria	VP5	Cayman Islands
DL	Germany	MC1 (MD1, MD2, MT2)	Libya	VP5	Jamaica
DU	Philippine Islands	MC1 (MC1, MD2, MT2)	Libya	VP6	Turks and Caicos Islands
EA	Spain	MD2 (MC1, MD1, MT2)	Libya	VP7	Barbados
EA6	Balearic Islands	MD3 (16)	Eritrea	VP8	Bahama Islands
EA8	Canary Islands	MD4 (MB4)	Somaland, Italian	VP8	Falkland Islands
EA9	Morocco, Spanish	MD6 (SU)	Egypt	VP8	South Georgia
EI	Eire	MD6 (X1)	Iraq	VP8	South Orkney Islands
EK	Tangier Zone	MD7 (ZC4)	Cyprus	VP8	South Sandwich Islands
EL	Liberia	MF2 (AG2)	Trieste	VP8	South Shetland Islands
EP, EQ	Ethiopia	MI3 (16, MD3)	Eritrea	VF9	Bermuda Islands
ET	Ethiopia	MP4 (VS9)	Oman	VQ1	Zanzibar
F	France	MS4 (MD4)	Somaland, Italian	VQ3	Rhodesia, Northern
FA	Corsica	MT2 (MC1, MD1, MD2)	Libya	VQ4	Tanganyika Territory
FB	Algeria	NY4	Guantanamo Bay	VQ5	Kenya
FB8	Madagascar	OA	Peru	VQ6	Uganda
FD8	Togoland, French	OE (MB9)	Austria	VQ8	Somaland, British
FE8	Cameroon, French	OH	Finland	VQ8	Chagos Islands
FF8	French West Africa	OK	Czechoslovakia	VQ9	Mauritius
FG8	Guadeloupe	ON	Belgium	VQ9	Seychelles
FH8	French Indo-China	OQ	Belgian Congo	VR1	Gilbert & Ellice Is., Ocean Is.
FK8	New Caledonia	OX	Greenland	VR2	Fiji Islands
FL6	Somaland, French	OY	Faeroes, The	VR3	Fanning Island (Christmas Is.)
FM8	Martinique	OZ	Denmark	VR4	Solomon Islands
FN	French India	PA	Netherlands	VR5	Tonga (Friendly) Islands
FO8	French Oceania (e.g. Tahiti)	PJ	Netherlands West Indies	VR6	Pitcairn Island
FP8	Miquelon and St. Pierre Islands	PK	Java	VS1, VS2	Malaya
FQ8	French Equatorial Africa	PK4	Sumatra	VS4	Borneo, British North
FR8	Reunion Island	PK5	Borneo, Netherlands	VS5	Brunei
FT4	Tunisia	PK6	Celebes and Molucca Islands	VS6	Sarawak
FU8	New Hebrides	PK7	New Guinea, Netherlands	VS7	Hong Kong
FY8	Guiana, French, and Inini	PX	Andorra	VS8	Ceylon
G	England	PY	Brazil	VS9	Aden and Socotra Island
GC	Channel Islands	PZ	Guiana, Netherlands (Surinam)	VS9 (MP4)	Oman
GD	Isle of Man	SM	Sweden	VU	India
GI	Ireland, Northern	SP	Poland	VU4	Laccadive Islands
GM	Scotland	ST	Anglo-Egyptian Sudan	VU5	Andaman and Nicobar Islands
GW	Wales	ST (MD5)	Egypt	VU7	Bahrain Island
HA	Hungary	SV	Greece	VU7 (K)	Nepal
HB	Switzerland	SV5	Dodecanese Islands (Rhodes)	XE	United States
HC	Ecuador	TA	Turkey	XZ	Mexico
HE1	Liechtenstein	TG	Iceland	YA	Burma
HH	Haiti	TF	Guatemala	YI (MD6)	Afghanistan
HI	Dominican Republic	TI	Cocos Islands	YJ (FUB)	Iraq
HK	Colombia	TI	Costa Rica	YK	Syria
HL	Korea	TT	Tannu Tova	YN	Nicaragua
HP	Panama	UA1	Franz Josef Land	YR	Roumania
HR	Honduras	UA1, 3, 4, 6, 7	European R.S.F.S.R.	YS	Salvador
HS	Siam	UA9, 0	Asiatic R.S.F.S.R.	YU	Jugoslavia
HV	Vatican City	UB5	Ukraine	YV	Venezuela
HZ	Saudi Arabia (Hejaz and Nejd)	UC2	Belorussia	ZB	Albania
I	Italy	UF6	Azerbaijan	ZB2	Malta
IS	Sardinia	UG6	Armenia	ZC1	Gibraltar
JA	Erea	UH8	Turkoman	ZC2	Transjordan
JB (MD3, M13)	Japan	UI8	Uzbek	ZC3	Cocos (Keeling) Islands
JT	Mongolian Republic (Outer)	UJ8	Tadzhik	ZC4 (MD7)	Christmas Islands
K	See under W	UL7	Kazakh	ZC8	Cyprus
KB6	Baker, Howland and Am. Phoenix Islands				Palestine, Arab

(Continued on page 12)

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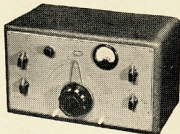
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Back in the days when lots of you young fellows were wearing diapers, we were working just as much DX with self excited oscillators and detector and audios, but in those days we acted like gentlemen. We did not swoop down upon a choice piece of DX as the other fellow was working and try and impose our signal on his, we waited until the QSO was completed and then called him from our own particular spot in the band. Personally I will not go back to a horde of signals calling me on my own frequency, but will deliberately pick the station calling away from me, if we all would adopt this practice it would soon put an end to this modern idea.

Don't get the idea that I think the old timers are blameless. From some of the quality I hear emanating from fellows who have had their call for many years, it would seem that they need to revise their knowledge of filter circuits and types of modulation. This is a bad state of affairs, it seems to me that as old timers it is up to us to set a standard for the young fellows to copy.

Thank Heavens we, as a majority, still speak the King's English. Just where did this abomination "MATER" come from, "Let's have a 'mater' about it." If you wish to have a yarn with a fellow, for the love of Mike say so and if you want to discuss something, let's discuss it. If we Amateurs are to be judged by the stuff we put over the air, it is up to us to improve ourselves in this respect.

Then there is the fellow who allows all and sundry to go over. Just recently I heard a station with a young child in the background who tried hard to at-

A little over twelve months ago "Gremlin" ceased to exist within the covers of this magazine. I promised in the May issue that a new author would appear in the June issue, but unfortunately it was not possible to use his material. From now on he will appear each month under the title **THE OLD MAN**.—Editor.

tract the attention of Daddy by making sundry remarks as "Daddy, pee pee;" this went on for quite some time when the operator of the station said: "Just a minute old man, I'll have to attend to something." It was amazing to me that he wasn't going for the floor cloth.

The idea of this column is to bring to your notice, things that perhaps you haven't noticed yourself doing and if you receive a personal mention, remember it was done to try and improve your transmission. Don't start crying and moving Heaven and Earth to have "The Old Man" removed from the magazine as you did with "Gremlin." "The Old Man" has a thick hide, toughened by years of contacts with all and sundry and he will NOT answer letters of protest in these columns, so save your ink and paper and when your temper has cooled down resolve to mend your ways.

Our latest menace is frequency modulation and from the stations I have heard using it so far, it would be much better for them to go back to amplitude,

if they can't remove the colossal amount of hum being mixed with the carrier.

For the best CQ merchant of the month, I dips my lid to VK2WF who was sending dozens of CQs without a call sign, and for the Ham with the worst key clicks I nominate VK3ACI.

I presume VK3BU is no gentleman he was heard as large as life in the 7000 to 7030 Kc. portion of the 40 metre band on telephony. I seem to recollect that we gentlemen did agree to reserve this portion of the band for c.w.; you might also sign your call occasionally VK3BU, instead of working cross-band without an announcement.

To VK5PH I present the palm for the signal with the largest amount of splatter. Why not a check some time with a Ham who will give you an honest report. Whilst on this subject fellows, please, when asked for a critical report, give a critical report and not the tongue-in-the-cheek type of thing one so often hears. If it hurts the other fellow it's just too bad, if he is the right type he will thank you and immediately set to work to correct the wrong.

From VK2ANF emanated the following, and I quote: "Oh I never call CQ, I just pop into the middle of a QSO when my friends are going." The Department have expressed their views on this sort of practice in no uncertain matter, perhaps it would be wiser VK2ANF to switch on and make the remark that it was VK2ANF testing; you could then be invited into the contact.

From the June issue of the magazine, I see that my South Australian friends have dealt with VK2JP, you beat the gun fellows. Cheers until next month.

MAGAZINE CONTRIBUTIONS

In order to avoid confusion and enable the forwarding of articles in an orderly basis, the Magazine Committee have drawn up the following set of regulations.

Contributors, particularly those of a technical nature, are requested to read the regulations carefully and to forward their contribution in the manner set out below.

1. Writers of articles are requested to forward their manuscripts to the Sub-Editor of their Division. (See heading of Divisional Notes for address).

2. Sub-Editors to forward articles to the Editor as soon as possible. In some cases articles have been held for several weeks before being forwarded with the Divisional Notes.

3. The Secretary of the Victorian Division will acknowledge receipt of the article as soon as received. Acknowledgment will be forwarded to both the writer of the article and the Sub-Editor concerned.

4. Articles which are considered to be unsuitable for publication will be re-

turned to the Sub-Editor with a covering letter. Should an article require amendment before being published, or if it is to be held for any lengthy period, the Sub-Editor will be notified.

5. Should an article be forwarded direct to the Editor, acknowledgment will be made to both the author and the Sub-Editor.

6. It should be noted that the normal delay for drafting, block-making and type-setting is about six weeks. Articles and blocks have to be in the printer's hands not later than the 5th of the month prior to the month of publication and the shortest possible time in which an article can be published is approximately three months.

NEWS FROM MACQUARIE ISLAND

The following may be of interest to those who have been fortunate enough to contact the Macquarie Island boys—or those still trying to.

VKIADS says he is not interested in DX although he has worked quite a

few DX stations on 14 Mc. phone. Countries worked include W, VE, KL7, G, GM, EI, YJ, CX, XE, HK, J, and ZL.

Ron also stated that he was not interested in c.w., his reason for moving down to 7 Mc. was lack of signals on twenty. He found all VK signals, with the exception of VK7s, were around the S3 level. VK7s were usually 3 to 4 points stronger. Strangely enough, most signals, even at S3, were readability 5.

VK1RD got his 50 Mc. beam up on the 26th May and is hoping it will stand up to the strong winds. Brian's 50 Mc. converter got knocked about on the trip down, but he thought he had it working again and had just finished it when QSOed on 27th May.

VK1AJT.—This station has been heard on 14 Mc. c.w. early in May with a chirpy note. Was working hosts of W stations. Gave his home QTH as 56 Leonora Street, Sth. Como, Western Australia.

VKIADS says he will QSL on his return home although already his YL is beginning to wonder if she will see much of Ron even next year—and the QSLs are still rolling in.

REMEMBRANCE DAY CONTEST 1949

The Remembrance Day Contest is an Australian Annual Contest to perpetuate the memory of those Australian Amateurs who gave their lives for their country during World War II. It is held on the week-end nearest to the 15th August in each year, the date on which hostilities ceased in the S.W.P.A.

A handsome Perpetual Trophy is awarded annually for competition between States, and is inscribed with the names of those who gave their lives, so perpetuating their memory throughout Amateur Radio in Australia. The name of the winning State for each year is inscribed on the Trophy.

RULES

1. The Contest will commence at 1800 hours E.A.S.T. on the 13th August and continue through until 1200 hours E.A.S.T. on the 14th August, 1949.
2. The Contest is open to all Australian Amateurs, but only members of the W.I.A. are eligible for the awards.
3. The Contest is an open contest—c.w., phone or a combination of both may be used.
4. The Contest is an Interstate Contest, and Amateurs in each State will endeavour to contact Amateurs in all other States.
5. A station may be operated by more than one operator provided that a separate log is entered for each operator under his own call sign.
6. All present Amateur bands may be used, and all transmissions must conform with the Regulations as laid down in the P.M.G.'s "Handbook for Operators of Amateur Wireless Stations," January, 1948. Any breaches of these regulations will lead to the disqualification of the station concerned.
7. The arranging of schedules for contacts on other bands will not be permitted.
8. All stations entering the Contest will call "CQ RD" if using c.w., and "CQ Remembrance Day" if using phone.
9. A State competing for the trophy must submit a minimum of six (6) logs from members before becoming eligible for contesting the Trophy.
10. Only one contact per station per band is permitted.
11. Each participant shall assign himself a three figure number. When more than one operator operates the same station, each must assign himself

a separate three figure number. To facilitate checking of logs, competitors are urged to use three figures which are not the same—serials such as 111, 222, etc., are to be avoided.

12. The exchange of serial numbers shall be as follows: The first three figures are those chosen in Rule 11 above, and will be retained throughout the Contest; and the second three numbers will commence with 000 for the first contact and for subsequent contacts will be the FIRST three numbers of the station of the PREVIOUS contact. A complete exchange of signal reports must also take place before any points may be claimed for the contact.

SCORING

13. In order that an equitable distribution of points for States with a large number of contest stations to a State with fewer contact stations may be determined, a sliding scale of points has been allotted as shown in the Scoring Table appended.

14. In addition to the points in the Scoring Table that may be scored, a bonus of 25 points may be added to the total score for each State worked on 50 Mc. or above.

LOGS

15. The log submitted must show in the following order: Date, Time (E.A.S.T.), Station Worked, Band, Type of Emission, Signal Report Sent, Signal Report Received, Serial Sent, Serial Received, and Points Claimed.

16. A Statement signed by the operator must be attached at the conclusion of the log, stating that the Regulations (Rule 6) and these Rules have been observed. Any logs departing from this form will be automatically disqualified.

17. All logs must be forwarded through the Contestant's Divisional Council (for membership checking) to reach Federal Executive, Box 2611W, G.P.O., Melbourne, on or before the 5th September, 1949.

AWARDS

18. Attractive Certificates will be awarded to the First, Second, and Third Highest Stations in each State. There shall be no outright winner for Australia. Where a large number of logs are received from any one State, further certificates may be issued at the discretion of the Contest Committee.

TROPHY

19. The State to which the Perpetual Trophy is to be awarded shall be determined as follows: The logs of the six (6) highest scorers in each State (see Rule 9) shall be averaged. To this average shall be applied a multiplier which shall be formed by taking the total log entries from a State and dividing by the total number of licensed Amateurs in that State at the date of the Contest.

20. The logs which will be accepted for the multiplier as determined under Rule 19 shall show at least five (5) contacts in the Contest.

21. The Trophy shall be forwarded to the winning State, in its container and will be held by that State for a period of 12 months, when the winner for the succeeding year is determined.

22. The Contest Committee shall be the sole adjudicators, and their ruling shall be binding in the case of any dispute.

LIST OF COUNTRIES BY PREFIXES

(Continued from page 9)

ZD1	.....	Sierra Leone
ZD2	.....	Nigeria
ZD3	.....	Gambia
ZD4	.....	Gold Coast (Br. Togoland)
ZD6	.....	Nyasaland
ZD7	.....	St. Helena
ZD8	.....	Ascension Island
ZD9	.....	Tristan da Cunha and Gough Is.
ZE	.....	Rhodesia, Southern
ZK1	.....	Cook Island
ZK2	.....	Niue
ZL	.....	New Zealand
ZM	.....	Samoa, Western
ZP	.....	Paraguay
ZS	.....	Union of South Africa
ZS2	.....	Marion Island (Prince Edward Is.)
ZS3	.....	Southwest Africa
ZS7	.....	Swaziland
ZS8	.....	Basutoland
ZS9	.....	Bechuanaland
4X4	.....	Israel

COUNTRIES WITH NO ALLOTTED PREFIXES

Aldabra Islands
Antarctica
Bhutan
Clipperton Island
Comoro Islands
Easter Island
Galapagos Islands
Guinea, Spanish
Ifni
Jan Mayen Island
Kerguelen Islands
Kuwait
Maldiv Islands
Principe and Sao Thome Islands
Rio de Oro
San Marino
Tokelau (Union) Islands
Wrangel Islands
Yemen

SCORING TABLE

				TO						
	VK2	VK3	VK4	VK5	VK6	VK7	VK9	Total		
	VK2	-	1	2	3	5	4	6	21	
	VK3	1	-	3	2	5	4	6	21	
	VK4	1	2	-	3	6	5	4	21	
FROM	VK5	2	1	3	-	5	4	6	21	
	VK6	1	2	4	3	-	5	6	21	
	VK7	2	1	4	3	5	-	6	21	
	VK9	1	2	3	4	5	6	-	21	

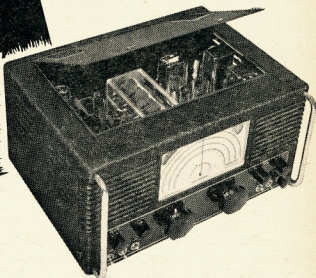
NOTE.—Read the Table from Left to Right for points for the various States.

EXAMPLES—

a VK2 scores 1 pt. for VK3 contact
2 " " VK4 " " etc.
3 " " VK5 " " etc.

a VK6 scores 1 pt. for VK2 contact
2 " " VK3 " " etc.
4 " " VK4 " " etc.

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Compiled by J. K. RIDGWAY, VK3CR.

Amateur Radio, July, 1949

Page 15



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FEDERAL, QSL, and DIVISIONAL NOTES

Federal President: W. R. Gronow, VKJWG; Federal Secretary: W. T. S. Mitchell, VKJUM, Box 2611W, G.P.O., Melbourne.

NEW SOUTH WALES

Secretary—Dick Dowe (VK2RP), Box 1734, G.P.O., Sydney.

Meeting Night—Fourth Friday of each month at Science House, Corner Gloucester and Essex Sts., Sydney.

Divisional Sub-Editor—L. D. Cuffe, VK2AM, 14b Watson Street, Neutral Bay, N.S.W.

Zone Correspondents—North Coast and Tablelands: P. A. H. Alexander, VK2FA, Hill St., Port Macquarie; Newcastle: E. J. Baker, VK2FP, 13 Seaton St., Hamilton, Newcastle; Coast and Lakes: H. Hawkins, VK2YL, 27 Comfort Ave., Cessnock; Western: G. J. Russell, VK2QA, 110 Regan St., Snygum; South Coast and Tablelands: R. H. Rayner, VK2DO, 42 Pettit St., Yass; Southern: E. N. Arnold, VK2BJ, 673 Forrest Hill Ave., Albury; Western Suburbs: A. O. Pearce, VK2AH, 48 Hazzardbrook Ave., Five Docks; Eastern Suburbs: H. Kerr, VK2AX, No. 4 Flat, 114 Hewlett St., Bronte; North Sydney: L. D. Cuffe, VK2AM, 779 Military Rd., Mosman; St. George: J. A. Ackerman, VK2ALO, 3 Park Rd., Carlton; South Sydney: V. H. Wilson, VK2IV, Cr. Wilton St. and Marine Pde., Maroubra.

VICTORIA

Secretary—C. C. Quin, VK3WQ.

Administrative Secretary—Mrs. O. Cross, Law Court Chambers, St. Melbourne, C.I.

Meeting Night—First Wednesday of each month at the Radio School, Melbourne Technical College.

Zone Correspondents—North Western: R. E. Trubich, VK3TL, 132 Victoria St., Kew; Western: C. C. Waring, VK3YW, 12 Skene St., Stawell; South Western: W. H. Ross, VK3UT, Ballarat; W. Williams, VK3AB, Northcote; St. A. Miller, VK3ABG, "Etrivale", Avenue 3, North-Western Zone; Harry Dobbin, VK3MF, 42 Walnut Ave., Mildura; Eastern Zone: Mrs. P. M. Churchward, VK3US, "Shirley", Red Hill.

FEDERAL

DX C.C. LISTING

We welcome to this month's listing, the first VK7-VK7LZ. Congratulations, but who is going to be first from VK5?

PHONE

Zone Countries

VK3JD (1)	84	125
VK3RU (2)	87	117
VK3BE (3)	27	113
VK4EL (4)	36	113
VK3JO (5)	100	
VK6DD (6)	100	

C.W.

Zone Countries

VK3CN (1)	40	138
VK3BE (2)	40	135
VK3YW (4)	39	131
VK4EL (6)	29	124
VK3EK (8)	39	122
VK3KH (10)	39	121
VK2BO (2)	40	116
VK4DA (7)	38	113
VK4HR (8)	38	113
VK2QL (6)	40	112
VK4EL (11)	34	111
VK3UM (12)	36	104

OPEN

Zone Countries

VK3BZ (4)	40	163
VK2DI (2)	40	160
VK3IE (15)	39	161
VK6RU (8)	37	146
VK3HG (8)	89	142
VK3KK (1)	89	136
VK6W (13)	39	133
VK3MC (5)	39	132
VK4HR (7)	38	132
VK4EL (10)	39	124
VK3V (16)	39	123
VK3OP (19)	39	108

New Open Members:—

Zone Countries	
VK6DD (22)	105
VK7LZ (23)	100



WI BROADCASTS

All Amateurs are urged to keep these frequencies clear during, and for a period of 15 minutes after, the official Broadcasts.

VK2WI—Sundays, 1100 hours EST, 7196 Kc. and 2000 hours EST, 50.4 Mc. No frequency checks available from VK2WI. Intra-State working frequency, 7175 Kc.

VK3WI—Sundays, 1130 hours EST, simultaneously 3580 and 7196 Kc. and re-broadcast on 50 and 144 Mc. bands. Intra-State working frequency 7185 Kc. Individual frequency checks of Amateur Stations given when VK3WI is on the air.

VK4WI—Sundays, 0900 hours P.S.T. simultaneously on 3750 Kc., 7196 Kc., 14342 Kc., 32.4 Mc. and 144.138 Mc. Frequency checks are given two nights weekly, and the times are announced in the weekly broadcasts. 7065 Kc. channel is used from 1000 to 1030 hours each Sunday as VK4 query service to VK4WI.

VK5WI—Sundays, 1000 hours S.A.S.T. on 7196 Kc. Frequency checks are given by VK5DW on Friday evenings on the 7 and 14 Mc. bands.

VK6WI—Saturdays 1400 hours, Sundays 0920 hours W.A.S.T. on 7196 Kc. No frequency checks available.

VK7WI—Second and Fourth Sundays at 1000 hours E.S.T. on 7196 Kc. No frequency checks are available.

COUNTRIES LIST

Due to the inclusion of Newfoundland and Labrador into the Dominion of Canada, they are to be deleted from the Countries List. As from the next listing, members' totals will be adjusted accordingly.

As DL calls are now being issued to German Nationals, all future cards from Germany from such stations will be accepted for DX C.C. provided that the contact takes place on or after the 24th March, 1949, the date of re-licencing. This does not apply to DL2, DL4 or DL5 stations.

Delete Newfoundland and Labrador (2, 6) . VO Cards for Israel are not yet being accepted until the date of official partition is announced. All cards being received but not needed. The date will be announced in these notes.

AMATEUR PREFIXES

Elsewhere in this issue will be found the latest list of countries by prefixes. This has been compiled by the Awards Committee and should prove of interest to DXers and SWLs alike.

W.I.A. ACTIVITIES CALENDAR

July 3: R.S.G.B. 144 Mc. Field Day Contest.
August 13-14: Remembrance Day Contest.
August 20-21: R.S.G.B. 420 Mc. Contest.
Sept. 25: R.S.G.B. Direction Finding Contest.
Oct. 1-2: 1949 VK-ZL DX Contest (c.w.).
Oct. 8-9: 1949 VK-ZL DX Contest (phone).
Oct. 15-16: 1949 VK-ZL DX Contest (c.w.).
Oct. 22-23: 1949 VK-ZL DX Contest (phone).
Oct. 29-30: European DX Contest.

SAN MARINO OPERATION

We have been notified by the A.R.I. that during their annual Convention to be held in Rimini, San Marino, many of their members will be operating portable using their normal I calls with "MI." The dates of operation will be from the 4th to 8th July inclusive. Here is an opportunity to work that rare one!

1949 TRANS-TASMAN CONTEST

The annual contest between the VKs and ZLs is over for another 12 months, and seems to have

QUEENSLAND

Secretary—W. L. Stevens, VK4TB, Box 6382, G.P.O., Brisbane.

Meeting Night—Last Friday in each month at the State Service Building, Elizabeth St., City.

Divisional Sub-Editor—F. H. Shannon, VK4SN, Minden, via Rosewood.

SOUTH AUSTRALIA

Secretary—E. A. Barbier, VK5MD, Box 1234K, G.P.O., Adelaide.

Meeting Night—Second Tuesday of each month at 17 Waymouth St., Adelaide.

Divisional Sub-Editor—W. P. Parsons, VK5PS, 453 Esplanade, Henley Beach.

WESTERN AUSTRALIA

Secretary—W. E. Coxon, VK6AG, 7 Howard St., Perth.

Meeting Place—Pudbury House, Cur. St. George's Street and King St., Perth.

Meeting Night—Watch the Monthly Bulletin.

Divisional Sub-Editor—D. Couch, VK6WT, Mary St., Waterman's Bay, Western Australia.

TASMANIA

Secretary—R. D. O'May, VK7OM, Box 371B, G.P.O., Hobart.

Meeting Night—First Wednesday of each month at the Photographic Society's Rooms, 143 Liverpool St., Hobart.

Divisional Sub-Editor—Capt. E. J. Cruise, VK7ER, Angelsea Barracks, Hobart.

Northern Correspondent: C. P. Wright, VK7LZ, 5 Knight St., Launceston.

received much more support than last year. The ZLs were very scarce in the c.w. section on all bands, but the open and phone sections appeared to have many starters. We trust that all who entered will send in their logs to assist in the checking.

W.A.C. CERTIFICATES

The following W.A.C. Certificates have been issued post-war to Australia: VKs 2YC, 2DI (2), 2NP, 2HI, 2WD, 2TG (2), and 2XU; VKs 3XX, 3BZ (2), 3JA, 3YS, 3PG, 3YV, 3GG, 3CN, 3XJ, 2HO, 3HW, 3JE (2), 3EB, 3EV, 3ZC, 3CO, and 3WL; VKs 4HR (2), 4EL, 4RC, 4UX, 4EL, 4WF and 4PZ; VKs 5JS, 5MP, 5WG, 5LU, 5LC, 5FH, 5DG, 5LB, 5GD, 5MO, 5MD, and 5LG; VKs 6MU, 6RU, 6KW (2), 6WS, 6PJ, 6BG, and 6DX; VKs 7LZ, 7AB, 7DW, 7RK, and 7LZ.

The following Certificates have been received and will be issued in a few days: VKs 4QO, 4SN, 4XJ, 5GN, and 6ZO.

W.B.E. CERTIFICATES

The following W.B.E. Certificates have been issued post-war: VKs 2TG (2), 3BZ (2), 3JE (2), and 3YW.

SLOW MORSE TRANSMISSIONS

The value of these transmissions is now being realised and many reports are to hand extolling the merit of this service from official W.I.A. stations. All W.I.A. stations are asked to regularly announce times of transmissions for SWLs and potential Amateurs alike. The letter contained in the "Correspondence" column of this issue indicates what interest can be taken in this W.I.A. privilege—make use of it and, by your letters, we may assess whether its value is worthwhile.

The following are the times and dates of this service: Sunday—VK3WI, 1100 to 1130 hours E.A.S.T. Monday—VK2WI, 2000 to 2030 hours E.A.S.T. Tuesday—VK4WI, 1930 to 2000 hours E.A.S.T. Wednesday—VK5WI, 2130 to 2300 hours E.A.S.T. Thursday—VK6WI, 1930 to 2000 hours E.A.S.T. Friday—VK6WI, not operating at present.

All transmissions are on 3504 Kc.

1949 REMEMBRANCE DAY CONTEST

Elsewhere in this issue will be found the Rules for the 1949 Remembrance Day Contest. It was deservedly a popular contest last year—let us keep it that way. We have no doubt that it will be

THE Contest, bearing in mind the worthy reason for its inauguration.

One major change has been made in the Rules in relation to determining the Perpetual Trophy. This Rule should encourage everyone to enter, for by his entry he will be contributing to his State's score; and will not feel it is just another Contest for the few who win year after year.

FEDERAL QSL BUREAU

RAY JONES, VK3RJ, MANAGER

Numerous enquiries have been received as to the reason for the absence of Federal QSL Bureau notes from the past four issues of "Amateur Radio" and requests for their continuance. It is hoped that the Notes Editor will be able to find and maintain the space for their inclusion. (No copy was received for that period—Editor.)

In some districts of Vienna and in Lower Austria all letters from abroad are censored and in most cases QSL cards are confiscated. To avoid this, it is requested that cards for OE stations should not be sent direct but sent in care of the R.S.G.B.

Eric Trebilcock, B.E.S. 195, is now located in Williamstown, Victoria, after many wanderings through the various States of the Commonwealth. It is hoped that Eric will again become an active transmitter in the near future.

Writing under date of 27th April, Stan Mayne VE2AS states: "What is wrong with our VK rollers. Out of 16 QSLs, I only got two back." Do the right thing chaps, Stan is on 7147 Kc. with 60 watts and hopes soon to be on 14 Mc.

The QSL address for licensed amateurs in Germany is Postbox 585, Stuttgart, Germany.

George LUXON VK6RX, the South Australian QSL Manager, has received his Certificate from EZ for contact with ten EZ stations, and is the first VK3 station to qualify for the award which is issued by the Canal Zone Amateur Radio Association. Other Australian stations who have received the award are VKs 2DI, 2FL, 3RG. Three ZLs have also made the grade. The C.Z.A.R.A. also has a bigger and better Certificate for contacts with 25 EZ stations but so far no VK or ZL stations have made a claim.

VERAFY John Scott, 150 Dowling Avenue, Toronto 3, Ontario, Canada, writes on behalf of his

wife who is a keen philatelist and would like to get in touch with VK Hams who are bitten by the same bug. Mrs. Scott will exchange W and VE stamps for Australian stamps or will exchange VE and W magazines for Australian stamps. Mrs. Scott's name is Alyce.

Arthur Milne GIML, in a letter to the writer, mentions that as QSL manager, shy assisted by his wife, they get through up to 30,000 cards weekly. Arthur deplores the fact that this work restricts his activity on the air! He asks me to tip off the VKs and VK6 managers to send their cards at commercial paper rates instead of letter rates and thus save their Divisions a position in postage. Arthur states that despatches at letter rates inevitably arrive at the same time as those sent at the cheaper rate.

My South Australian colleague, VK6RX, who has just received his A.R.R.L. DX C.C. Certificate and is highly delighted with it, points out that I have an exact zamsake in W land as the call book shows the license holder of WTKSP as E. J. Jones. I must QSO that guy somehow, some day.

Any reader knowing of housing accommodation sufficient to cover the needs of a Czech Amateur, his wife, and two small children, should advise the Federal QSL Manager. The Czech, who is non-jewish and an electrical engineer, was just about to migrate to Australia when World War II intervened. He is still extremely desirous of migrating here but the problem now is enhanced by the housing difficulties and the additions to his family.

STATE QSL BUREAU

NEW SOUTH WALES

J. B. Corbin, VK2YC, 78 Maloney St., Eastlakea.

VICTORIA

Outward—Bring your cards into the General Meeting OR post to Outwards QSL Manager, Mr. F. O'Dwyer, 190 Thomas Street, Hampton, S.7. Price is 1d. per card. Cards to VK3 are free.

Inward—Collect cards at the General Meeting OR supply Inwards QSL Manager, Mr. G. Roper, 26 Lucas Street, Caulfield, S.E.S., with stamped addressed envelopes.

QUEENSLAND

Outward—B. Campbell, VK4RC, 30 Prospect Terrace, Kelvin Grove, Brisbane.

Inward—E. Lake, VK4EL, Old Cleveland Road, Camp Hill, Brisbane.

SOUTH AUSTRALIA
G. Luxon, VK6RX, 8 Brook St., West Mitham, South Australia.

WESTERN AUSTRALIA
J. Rumble, VK6RU, Box F319, Perth, W.A.

TASMANIA
T. Allen, VK7AL, 6 Thirza St., New Town, Tas.
MORESBY AREA ONLY
G. Warner, VK9GW, c/o. O.T.C., Port Moresby.

NEW SOUTH WALES

The monthly general meeting of the Division was held at Science House, Gloucester Street, Sydney, on Friday, 27th May. PA0ZC headed the list of visitors, and after they had been welcomed by the President, the Federal Councillor, John Moyle 2JU, delivered his report to the meeting, on the recent Federal Convention in Melbourne. At the conclusion of his report, carried out in his usual efficient style, the meeting dealt with a query as to the validity of the recent ballot for a new Council. This developed into such a lengthy and, at times, heated discussion that insufficient time remained for the lecture by Nev Williams, 2XY, on "Super Modulation." As this lecture had been awaited with great interest, disappointment was evidenced on all sides, and apologies were made to Mr. Williams, with the sincere request that he be kind enough to deliver his talk at the next meeting.

Later, during general business discussions, various speakers made reference to the question of the Amateur position in regard to TVI, a matter of urgency with TV only a comparatively short time away.

NORTH SHORE ZONE

2NBG has a new six metre beam, and was so anxious to get it going he hooked up a long length of 300 ohm ribbon as a feeder, draping it all over the garden, bushes, across the path, and up into the shack. On his first attempt, he worked 2LY at Katoomba, getting an S8 report! So why worry about having the feeders in the clear! Congratulations to 2LY, who pulled off a smooth one by snagging that old stalwart in the Argentine, LU7AZ, on 80 metres. Very f.b. and how about the phone boys giving the c.w. DX men a bit of a go on this

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band now and again. They don't ask for much, and you phone kings have the major portion of the band as it is. So how about it, gang?

20R has worked his first post-war Q on phone—it's not so long ago he was dishing it out from G to VR, as many of us remember. 21X is now having himself fun on six metres, and should snag a bit of decent DX on that band with his ideal location, which is on one of the high headlands along the coast. 22H has his eye on transmitter design and re-build. Guess this must be in the nature of a revolt from receivers. 23V's receiver finished and most mised, and is at long last back in business—which means I am as well, since we were riggers. Long time no CX, two nice circumstances have kept us off for very nearly a year.

24G may be working nearer to his home in future, which means another starter for the lunch-time tonal exercises! 26C now has a Qor ahead of the receiver, and is in the seventh heaven of selectivity as a result. 29G runs his own private beam service to G land with that GSPD gadget of his—when no one else can hear 'em, he works 'em! Well, that's about all this month. I'd certainly appreciate hearing from some of the gang in the Manly-Warringah area, also from someone up Hornsby way. How's about it, anybody with a pen?

EASTERN SUBURBS ZONE

2AX will be off for a while as he is going South on a duty assignment in the near future. Andy's helpful and semi-technical matters will be missed for he has an unusual knack for putting his finger on the spot when the boys get into trouble. 2CF finally finished the new receiver and is back on the air—after three months' absence. There is more than a suspicion that Yls had as much to do with his absence as the receiver. 24JG has completed his new frequency meter and is busy calibrating. 24Y is a.w.l.; not about much these days. 26Y possesses first class 40 metre phone and contemplating a lot of re-building in the immediate future.

2AIG still searching for 40 metre c.w. contacts. 2AIH not heard these days. Has had frequent attacks of "flu" which have prevented him from DXing on the super rig he has just completed—100 watts input—all stages are on one chassis, 19 x 84, and a first class job. Congratulations, Ted, on the arrival of the new junior op. 2ND heard from time to time putting consistent sign into G. How did your "props" take it in the recent gales, Don? That is what you must expect for possessing the best and possibly highest transmitting location in the metropolitan area! 2CE not heard for some time. That clock seems to be a problem, Alf, heard you shift it away from the mike but the old local WWV sig still crept thru very clearly. These phone and good operating are points at 2CE.

SOUTH ZONE

As the majority of Amateurs in this zone operate on the 2.4 m. bands, the main topic of the month is the 144 Mc. Contest. Three local stations have

taken part and 2ANB and 2WJ are well up among the leaders. The six metre band has been very quiet and 2ABC, 2WJ, and 2YW are the only locals heard.

The Kingsford Radio Club has at last managed to get a club room of their own and members are very busy fitting it out and getting the gear operating. By the time these notes are in print they should be heard on the air with the call 2AEC.

2ABH has been getting very good results with his two element beam on 20 metres and 2AB is also active on that band with a new transmitter. 2AC has been spending his time designing between 20 and 40 metres and working his share of DX on both bands. 2YW is busy putting up new tower and overhauling beams for the coming DX season. They will consist of 4 element beams for 144 and 50 Mc. and 3 element on 28 Mc.

Not much heard from 2ABC as he is busy building a new garage and workshop at week-end and too cold in shack at nights, in fact the cold weather seems to be keeping quite a few of the boys by the fire. I see my power tranny to keep my feet warm.

DX NOTES BY VKQL

Very little news this month, gang, one reason being my own inactivity on the bands through force of circumstances, and the other no "gen" from the DX gang. With the exception of 5RX, have heard nothing of the gang's doings, and as I have not 5RX's letter with me at the moment, I cannot pass on his "gen," but many thanks O.M. So, you see what happens to the column with no co-operation.

Congrats to 2RA, on contact with LU7AZ on 3.5 Mc. which gives him his 5th continent on that band. My apologies to 2KO, who has made W.A.C. on 3.5 Mc. I inadvertently omitted it from last month's notes. A fitting reward to some solid work on that band.

The bands have been very quiet for the month of May. I tried all bands except 28 Mc. when I was able to listen, and as predicted there was very little activity. This was more or less expected from working out the prediction charts. Some peculiar effect should be noticed on 14 Mc. for June, when there is a possibility signals will arrive in Sydney via short and long paths from some continents at approximately the same time of day. Talking to a ZL one night on 3.5 Mc., he said VK sigs were not arriving by their normal path.

The gang should soon take one station off the "black list," FUSAA. He has received his 2,000 cards, and now has the mammoth job of getting them out, but mails are slow and far between.

Cards received for the month, which may be of interest were F58AR, AR1WW, ZP2BL, WMCF, Formosa, H1SSS, ZCSPM, UQ2AB, RV4AA for 3.5 Mc.

21Z still calling the blokes in Zone 18 and 19 anything but gentlemen. Bad luck on those QSLs for your W.A.Z. Bill.

Finally, an appeal. What about adherence to the gentlemen's agreement re the clearing of the phone from the 144 Mc. frequency ends of the bands.

As has been proven, 3.5 Mc. is just as much a DX band as the higher ones, and of course 7 Mc., but many contacts on these bands are spoilt for the c.w. men, by the large amount of phone. I have been running a dead end R1R on 3520 Kc. but this channel is often ruined by phone, so there is very little hope of hearing the DX.

F.R.E. is being asked to draw the attention of N.Z.A.A. to the 144 Mc. frequency ends for ZL co-operation as far as 3.5 Mc. is concerned.

Well that's the lot, but once again, please, please some material gang. My phone number again is UM 6851.

COALFIELDS AND LAKES

2RU trying out new gear on 144 Mc. 2AEZ says 14 Mc. quiet, also working on some new gear. 2AMU cramped for space so re-designing shack with steel racks and distributing boards. 2ER, I hear and call you often on 40, listen for me towards end of month, re notes. The Wyong gang are apparently inactive at the moment as nothing heard from that area. 2AJB has consistent 40 metre phone sig.

Not much news from Singleton, last indication 2VL was doing some building and 21Z active on 10 metres. 21Y keeps Lochinvar on the map on 10 and 6 metres. 2MK seems more interested in the local Yrcher Club than in Hams. Range at the moment. 2PZ still battling for time to make some building progress; toying with possibilities of 20 metre beam. 2YO, what's wrong, gave the game away? 2RP is active on 6 and 10 metres in the limited time he has; phone is quite good these days.

2KZ more or less given the game away; had modulation trouble, so may be heard pounding brass if the urge prevails! 2DZ very active with 144 and 50 Mc.; had cross-band QSO to Sydney, trying a 2 metre receiver out at moment and has a new beam on 144 Mc. 2YL progressing slowly with re-building, should be active in few weeks' time.

In middle of May 2BR, 2KZ, 2RU, 2ADT, and 2YL made another trip to Sydney Hams and wish to thank all Hams visited for hospitality and helpfulness, with a special vote of thanks to 2XX, his wife and parents who kindly gave us accommodation.

NORTH COAST AND TABLELANDS

Much activity on 3.5 Mc. band by 2XO, 2AJB, 2A1Y, 2JC, 2G1, 2GE, conditions have been excellent for ZL evenings and early mornings. 2JU using a new folded dipole with excellent results, much talk about starting on f.m. 2EB now operating in Beilinson house. 2XO, I tried did not know he was there. Held by one of the Sydney boys. 2XO visited Sydney and the west, travelling by car, kept in contact using a Type A Mark III.

2A2B may be moving to Coff's Harbour shortly. 2DF now proud owner of a 649, runs complete outfit from vibrator supply. 2ASF very active on

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The Victorian Division A.O.C.P. Class will commence on Thursday, 14th July, 1949. Lectures are held on Monday and Thursday evenings from 8 to 10 p.m. Persons desirous of being enrolled should communicate with Secretary W.I.A., Victorian Division, 191 Queen St., Melbourne (Phone FJ 6997 from 9 a.m. to 5 p.m.), or the Class Manager on either of the above evenings.

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40 and owner of a new receiver, a 109 disposals job, which has been converted for plug-in coils. Plans breaking free on 14 Mc. shortly. 21R has just visited Sydney, and has not been in the best of health. The zone wishes you a speedy recovery Jerry OM.

WESTERN ZONE

2ACU still using AT3/ARS on 20, 40, 80, and has new rig finished but only keeps it to impress visitors. Drive visitor 2X0 round the town in the new gearbox, but all the watering plants. 2HC and 2JC also had visit on 20. Both the former still faithful to 80. 2YN working DX on 20, has an 88er in front of ARS. Received a visit from 2QA. 2QA revamped beam on 10, still likes rag-chewing with Ws on that band.

2ACT heard working portable from Katoomba. 2AMR working all bands still with his push button. 2X and 2Y on 20. 2X has a new rig, not going on 40 with some disposals gear; quality loud. 2VZ apparently on 20, mad with the DX. 2NS has the rotary beam working on 10 and judging from the number of stations heard calling him must be getting out well.

2WHI been holidaying in Sydney, and 2HT heard occasionally. 2JW still playing with n.b.m., with indifferent results. 2ALX has n.b.m. on his AT30, the results being very good. 2LY still doing the W.L.A.'s v.h.f. broadcast. 2LZ been heard on 40. 2HZ putting antennae on the new poles.

NEWCASTLE ZONE

2AGD had a great time up at the Urunga Convention and also caught the biggest fish that did not get away, as per fish fables. 2AGD and 2XX want to thank the Northern boys for the fine hospitality and good fellowship shown during their visit. 2AGY back from holidays in lead half of the beam, effective missing, blame the kookaburra, ask 2ANG about it. 2BZ and 2AHA using n.b.m., both sound pretty good even on an a.m. receiver.

2AFS on 10 consistently, getting the DX too. Will be rebuilding soon, has a 2X3 aluminium box to house the works. 2TE is the beam expert, always trying new types and now reported using 20W half-space on 10. When these new rigs are being read, the special beam 2E will be on the air, the locals are going to supply the big push to elevate the works. 2XQ been working on 20, 40, 80, and 160. 2XU has a new rig, closing DX on 10, latest cards from ZD4, ZS3, OK3, and VUT; 109 up on 10 metre phone using 35 watts.

SOUTH COAST AND TABLELANDS

20W mainly on 40 and amongst the DX too, worked WIRRL/RG66 on board the U.S.S. Hewell at Seapan, ZL/GHG/VY4 on New Georgia, VK9, 8L7, LA9; 20W and 20V are on 20 watts. New 'Rx ARS on order. 2FN Tumut contacted 2BW in Wagga on 80 Mc., using separate rig on 20, 40, 80, and 160. 2FT has a new rig, double conversion super; on with the DX 20.

2AMK at Cooma has a good signal and 2JQ heard on during the lunch hour. 2AP happy with an 88 report from VKIADS on Macquarie Island when other reports were there.

2AFV passed through Yass, looking well after his accident. 2ALN nil heard of him. 2ALS busy with another new car and not heard for three weeks. In the meantime, 2ALN has a new rig, is on 80. 2OY also clicked with VKIADS, but signals weak at Yass. Visitors 2ANR, 2ASD got together with 2AM, 2P and 2TV at Canberra. 2AP has a super RX in the building. 2PO another to collect VKIADS, has a gremlin in the RX.

VICTORIA

"STANDARD" FREQUENCY TRANSMISSIONS

Victorian Division members are advised that "Standard" Frequency Transmissions from VK3VJ, scheduled for 22nd July and 22nd October will now take place on Thursday, 28th July, and Thursday, 20th October. This change has been made in order to fit in with staffing arrangements at the Frequency Measuring Centre.

Members are also advised that in order to obviate the possibility of confusion with International standard frequency transmissions, the Division's "Standard" frequency transmissions will, in future, be known as "Accurate Frequency Transmissions" (A.F.T.).

Before making use of A.F.T., members should re-read J. Dunlop's article in the "Amateur Radio" in the January, 1949, issue of "Amateur Radio."

SOUTH WESTERN ZONE

While tuning over the 80, 40 and 20 metre Ham bands, one hears very little of what our gang are doing. The "gentlemen's" band, 40 metres, is flat here from about 8 p.m. on for VK3 signals, and on 20 the same thing happens down here, and

of late 80 has been quite good. The only ones that I have heard on 80 are 3HG with an 80 plus signal, 2JA who runs an 80-9 signal here, and 3AR who is always 8R. Have heard 3IL at times but not of late, what is the trouble Leigh?

Had a yarn to 3VA one Saturday afternoon, when he tried out some type of cathode, which he claims to be just the thing, what about the circuit in "A.R." some day Bert? 3BE had a very fine signal while it lasted the other night, but during the Sunday afternoon, Andy was 30 plus and f.b. phone. Andy, by the way, is having YL trouble also, as he had to cut our over short.

3BH has fungus in the eyes again, so let's hope Bert you are over the hump this time you read this. Heard 3YE making a bit of a row on 40 other day with an 87 signal. Vern is only one heard from Colae these days, what about those two wires? Vern? Have not heard any signals from Geelong gang, but was told that 3AKE has new super beam to put up when he gets the XYL's OK where to put pole up. 3AKR is erecting new super beam soon when he gets a mile of copper wire, it's to have a half mile on each leg, so I overheard the other night on 80 metres.

Geelong Amateur Radio Club.—At the first May meeting of the Club the recent field day, held by the Club, was the subject of discussion. It proved to be a successful and enjoyable one besides being exciting, as two of the members located the hidden transmitter within minutes of each other. The transmitter was hidden approximately 10 miles away and with the aid of portable receivers and loop antennae, members set out to find it. One party travelled 35 miles before finally locating it.

Mornington Peninsula Sub-Branch Hold a Successful Field Day

The Mornington Peninsula Sub-Branch of the Eastern Zone held a very successful field day on Sunday, the 29th May, to celebrate the first year of the Sub-Branch's operation. The day was dull and overcast with cold winds. The members met at 1130 hours and the 3B f.t. antennae and adjourned to listen to the W.L.A. broadcast. We all agreed that the announcer (VE3IK) should have held his throat before attempting to sing "Happy Birthday" anyway thanks for your try anyway. After chatting, etc., and hurried manufacture of loops, etc., the party then adjourned to the cricket ground for lunch, where boiling water was waiting.

After lunch there was a photo of a group taken (reproduced herewith), but the group was not of everyone, as several parties had moved off to get their gear set up on location for the Field Day activity. There were six stations operating portable, namely 3ANW, 3AHZ, 3ASR, 3KT, 3RR, 3UG. 3ANW operated on 50, 444 and 580 Mc. bands; 3AHZ on 580 Mc.; 3RR on 50 and 580 Mc. bands; 3ASR, 3KT, and 3UG operated on 3.5 and 7 Mc. bands.

The afternoon proved to be a "screwy" day on 50 Mc. with QSB both ways with Melbourne stations, while reports on 580 Mc. were quite steady. "Happy Birthday" anyway thanks for your try then Noel (VK4BT) pokes his nose down our way on 50 Mc. and was worked by Keith (3HK) from 1615-1645. Thanks for trying to come along to join in the fun Noel and the writer had a Scotch afterwards for you.

The hidden transmitter lived up to its name by not being located in the time allotted, viz: 1615-1700 hours. There were two parties, 3KT and gang and 3RR's party; both were very close at the finish. 3KT drove off with his truck on the wrong side of the road, while Dick's party nearly

Another (3APO) went on his push bike. The meeting was then left in the hands of Peter Clark, who lectured on "Noise Limiting" which proved to be helpful in the elimination of different types of noises in receivers caused by interference. The morning Jack Beckingham turned on "Post Office Long Line Equipment, Trunk Lines, and Carrier Equipment." This lecture preceded the tour of the Post Office with Mr. Beckingham and proved very interesting to the members who went.

FAR NORTH WESTERN ZONE

Since our last notes appeared, the Zone in general has been very inactive; tuning the bands, reception of signals emanating from our corner of VK3 land are lamentably few. In fact your scribe is often informed during the course of a QSO that "you're the first one I've worked up there."

Had a very pleasant time with 3FC and 3AFC on a recent visit to Ouyen. Yes, their signals are correct, and while more their antennas and systems well they aren't exactly touching, but you ask Frank or Fred some time! They are almost on our southern border for this Zone and we have hopes of 6 metre work with them later.

3FC is still piling up Ws on 40 c.w. with 10 watts to 807 and 3 tube 1R7. He says the EP50 on stage packs a punch, even close d.c. mains. Don't be alarmed if you hear Frank hit the band on phone, just a passing phase, or is it OM?

3AFC plus YF and first harmonic heading Sydney, warms very soon, modulator will get a rest, and may even land that xtal needed for the receiver. Fell for a beaut on same trip and this may be a tip for other would-be car-borne ops. Was situated

got covered in mud; but the creek was in the way when the transmitter closed down. It was a real good effort for two parties to be so close at the finish.

During the afternoon all parties were munching delicious apples bought along by 3AGL. There were 40 at the finish, and everyone d.c. mains, do," everyone enjoyed themselves to the full! After the tea—and washing down the tea—log books were checked and the prizes given for the field day. 3ANW won the first prize with 12 sets, 3RR the second, an 830B tube; 3KT, third, an 8R34 tube. George Glover (3AG) had a few words to say and the ladies were sent to the yarn and have a good time until they left for home.

It is recommended that next year's turn must not be missed as it will be even better next year and will be held a little earlier in the year so that we may have better weather. Many thanks to all those who came along for the day and next year we hope to see over 100 there.

ELECTION OF OFFICE-BEARERS

The monthly meeting of the Mornington Peninsula Sub-Branch of the Eastern Zone was held on 6th June and office-bearers were elected for the next year. The following were elected: Vice-President, Capt. Roberts; Secretary VK3KT, Treasurer VK3UG, Publicity Officer VK3ABO, Technical Advisory Committee VK3AR, VK3AD, VK3AL, VK3AG, VK3AE, VK3AF, VK3AG, VK3AH, VK3AI, VK3AJ, VK3AK, VK3AL, VK3AM, VK3AN, VK3AO, VK3AP, VK3AQ, VK3AR, VK3AS, VK3AT, VK3AU, VK3AV, VK3AW, VK3AX, VK3AY, VK3AZ, VK3BA, VK3BB, VK3BC, VK3BD, VK3BE, VK3BF, VK3BG, VK3BH, VK3BI, VK3BJ, VK3BK, VK3BL, VK3BM, VK3BN, VK3BO, VK3BP, VK3BQ, VK3BR, VK3BS, VK3BT, VK3BU, VK3BV, VK3BW, VK3BX, VK3BY, VK3BZ, VK3CA, VK3CB, VK3CC, VK3CD, VK3CE, VK3CF, VK3CG, VK3CH, VK3CI, VK3CJ, VK3CK, VK3CL, VK3CM, VK3CN, VK3CO, VK3CP, VK3CQ, VK3CR, VK3CS, VK3CT, VK3CU, VK3CV, VK3CW, VK3CX, VK3CY, VK3CZ, VK3DA, VK3DB, VK3DC, VK3DD, VK3DE, VK3DF, VK3DG, VK3DH, VK3DI, VK3DJ, VK3DK, VK3DL, VK3DM, VK3DN, VK3DO, VK3DP, VK3DQ, VK3DR, VK3DS, VK3DT, VK3DU, VK3DV, VK3DW, VK3DX, VK3DY, VK3DZ, VK3EA, VK3EB, VK3EC, VK3ED, VK3EE, VK3EF, VK3EG, VK3EH, VK3EI, VK3EJ, VK3EK, VK3EL, VK3EM, VK3EN, VK3EO, VK3EP, VK3EQ, VK3ER, VK3ES, VK3ET, VK3EU, VK3EV, VK3EW, VK3EX, VK3EY, VK3EZ, VK3FA, VK3FB, VK3FC, VK3FD, VK3FE, VK3FF, VK3FG, VK3FH, VK3FI, VK3FJ, VK3FK, VK3FL, VK3FM, VK3FN, VK3FO, VK3FP, VK3FQ, VK3FR, VK3FS, VK3FT, VK3FU, VK3FV, VK3FW, VK3FX, VK3FY, VK3FZ, VK3GA, VK3GB, VK3GC, VK3GD, VK3GE, VK3GF, VK3GG, VK3GH, VK3GI, VK3GJ, VK3GK, VK3GL, VK3GM, VK3GN, VK3GO, VK3GP, VK3GQ, VK3GR, VK3GS, VK3GT, VK3GU, VK3GV, VK3GW, VK3GX, VK3GY, VK3GZ, VK3HA, VK3HB, VK3HC, VK3HD, VK3HE, VK3HF, VK3HG, VK3HH, VK3HI, VK3HJ, VK3HK, VK3HL, VK3HM, VK3HN, VK3HO, VK3HP, VK3HQ, VK3HR, VK3HS, VK3HT, VK3HU, VK3HV, VK3HW, VK3HX, VK3HY, VK3HZ, VK3IA, VK3IB, VK3IC, VK3ID, VK3IE, VK3IF, VK3IG, VK3IH, VK3II, VK3IJ, VK3IK, VK3IL, VK3IM, VK3IN, VK3IO, VK3IP, VK3IQ, VK3IR, VK3IS, VK3IT, VK3IU, VK3IV, VK3IW, VK3IX, VK3IY, VK3IZ, VK3JA, VK3JB, VK3JC, VK3JD, VK3JE, VK3JF, VK3JG, VK3JH, VK3JI, VK3JJ, VK3JK, VK3JL, VK3JM, VK3JN, VK3JO, VK3JP, VK3JQ, VK3JR, VK3JS, VK3JT, VK3JU, VK3JV, VK3JW, VK3JX, VK3JY, VK3JZ, VK3KA, VK3KB, VK3KC, VK3KD, VK3KE, VK3KF, VK3KG, VK3KH, VK3KI, VK3KJ, VK3KK, VK3KL, VK3KM, VK3KN, VK3KO, VK3KP, VK3KQ, VK3KR, VK3KS, VK3KT, VK3KU, VK3KV, VK3KW, VK3KX, VK3KY, VK3KZ, VK3LA, VK3LB, VK3LC, VK3LD, VK3LE, VK3LF, VK3LG, VK3LH, VK3LI, VK3LJ, VK3LK, VK3LL, VK3LM, VK3LN, VK3LO, VK3LP, VK3LQ, VK3LR, VK3LS, VK3LT, VK3LU, VK3LV, VK3LW, VK3LX, VK3LY, VK3LZ, VK3MA, VK3MB, VK3MC, VK3MD, VK3ME, VK3MF, VK3MG, VK3MH, VK3MI, VK3MJ, VK3MK, VK3ML, VK3MM, VK3MN, VK3MO, VK3MP, VK3MQ, VK3MR, VK3MS, VK3MT, VK3MU, VK3MV, VK3MW, VK3MX, VK3MY, VK3MZ, VK3NA, VK3NB, VK3NC, VK3ND, VK3NE, VK3NF, VK3NG, VK3NH, VK3NI, VK3NJ, VK3NK, VK3NL, VK3NM, VK3NN, VK3NO, VK3NP, VK3NQ, VK3NR, VK3NS, VK3NT, VK3NU, VK3NV, VK3NW, VK3NX, VK3NY, VK3NZ, VK3OA, VK3OB, VK3OC, VK3OD, VK3OE, VK3OF, VK3OG, VK3OH, VK3OI, VK3OJ, VK3OK, VK3OL, VK3OM, VK3ON, VK3OO, VK3OP, VK3OQ, VK3OR, VK3OS, VK3OT, VK3OU, VK3OV, VK3OW, VK3OX, VK3OY, VK3OZ, VK3PA, VK3PB, VK3PC, VK3PD, VK3PE, VK3PF, VK3PG, VK3PH, VK3PI, VK3PJ, VK3PK, VK3PL, VK3PM, VK3PN, VK3PO, VK3PP, VK3PQ, VK3PR, VK3PS, VK3PT, VK3PU, VK3PV, VK3PW, VK3PX, VK3PY, VK3PZ, VK3QA, VK3QB, VK3QC, VK3QD, VK3QE, VK3QF, VK3QG, VK3QH, VK3QI, VK3QJ, VK3QK, VK3QL, VK3QM, VK3QN, VK3QO, VK3QP, VK3QQ, VK3QR, VK3QS, VK3QT, VK3QU, VK3QV, VK3QW, VK3QX, VK3QY, VK3QZ, VK3RA, VK3RB, VK3RC, VK3RD, VK3RE, VK3RF, VK3RG, VK3RH, VK3RI, VK3RJ, VK3RK, VK3RL, VK3RM, VK3RN, VK3RO, VK3RP, VK3RQ, VK3RR, VK3RS, VK3RT, VK3RU, VK3RV, VK3RW, VK3RX, VK3RY, VK3RZ, VK3SA, VK3SB, VK3SC, VK3SD, VK3SE, VK3SF, VK3SG, VK3SH, VK3SI, VK3SJ, VK3SK, VK3SL, VK3SM, VK3SN, VK3SO, VK3SP, VK3SQ, VK3SR, VK3SS, VK3ST, VK3SU, VK3SV, VK3SW, VK3SX, VK3SY, VK3SZ, VK3TA, VK3TB, VK3TC, VK3TD, VK3TE, VK3TF, VK3TG, VK3TH, VK3TI, VK3TJ, VK3TK, VK3TL, VK3TM, VK3TN, VK3TO, VK3TP, VK3TQ, VK3TR, VK3TS, VK3TT, VK3TU, VK3TV, VK3TW, VK3TX, VK3TY, VK3TZ, VK3UA, VK3UB, VK3UC, VK3UD, VK3UE, VK3UF, VK3UG, VK3UH, VK3UI, VK3UJ, VK3UK, VK3UL, VK3UM, VK3UN, VK3UO, VK3UP, VK3UQ, VK3UR, VK3US, VK3UT, VK3UU, VK3UV, VK3UW, VK3UX, VK3UY, VK3UZ, VK3VA, VK3VB, VK3VC, VK3VD, VK3VE, VK3VF, VK3VG, VK3VH, VK3VI, VK3VJ, VK3VK, VK3VL, VK3VM, VK3VN, VK3VO, VK3VP, VK3VQ, VK3VR, VK3VS, VK3VT, VK3VU, VK3VV, VK3VW, VK3VX, VK3VY, VK3VZ, VK3WA, VK3WB, VK3WC, VK3WD, VK3WE, VK3WF, VK3WG, VK3WH, VK3WI, VK3WJ, VK3WK, VK3WL, VK3WM, VK3WN, VK3WO, VK3WP, VK3WQ, VK3WR, VK3WS, VK3WT, VK3WU, VK3WV, VK3WW, VK3WX, VK3WY, VK3WZ, VK3XA, VK3XB, VK3XC, VK3XD, VK3XE, VK3XF, VK3XG, VK3XH, VK3XI, VK3XJ, VK3XK, VK3XL, VK3XM, VK3XN, VK3XO, VK3XP, VK3XQ, VK3XR, VK3XS, VK3XT, VK3XU, VK3XV, VK3XW, VK3XX, VK3XY, VK3XZ, VK3YA, VK3YB, VK3YC, VK3YD, VK3YE, VK3YF, VK3YG, VK3YH, VK3YI, VK3YJ, VK3YK, VK3YL, VK3YM, VK3YN, VK3YO, VK3YP, VK3YQ, VK3YR, VK3YS, VK3YT, VK3YU, VK3YV, VK3YW, VK3YX, VK3YY, VK3YZ, VK3ZA, VK3ZB, VK3ZC, VK3ZD, VK3ZE, VK3ZF, VK3ZG, VK3ZH, VK3ZI, VK3ZJ, VK3ZK, VK3ZL, VK3ZM, VK3ZN, VK3ZO, VK3ZP, VK3ZQ, VK3ZR, VK3ZS, VK3ZT, VK3ZU, VK3ZV, VK3ZW, VK3ZX, VK3ZY, VK3ZZ, VK3AA, VK3AB, VK3AC, VK3AD, VK3AE, VK3AF, VK3AG, VK3AH, VK3AI, VK3AJ, VK3AK, VK3AL, VK3AM, VK3AN, VK3AO, VK3AP, VK3AQ, VK3AR, VK3AS, VK3AT, VK3AU, VK3AV, VK3AW, VK3AX, VK3AY, VK3AZ, VK3BA, VK3BB, VK3BC, VK3BD, VK3BE, VK3BF, VK3BG, VK3BH, VK3BI, VK3BJ, VK3BK, VK3BL, VK3BM, VK3BN, VK3BO, VK3BP, VK3BQ, VK3BR, VK3BS, VK3BT, VK3BU, VK3BV, VK3BW, VK3BX, VK3BY, VK3BZ, VK3CA, VK3CB, VK3CC, VK3CD, VK3CE, VK3CF, VK3CG, VK3CH, VK3CI, VK3CJ, VK3CK, VK3CL, VK3CM, VK3CN, VK3CO, VK3CP, VK3CQ, VK3CR, VK3CS, VK3CT, VK3CU, VK3CV, VK3CW, VK3CX, VK3CY, VK3CZ, VK3DA, VK3DB, VK3DC, VK3DD, VK3DE, VK3DF, VK3DG, VK3DH, VK3DI, VK3DJ, VK3DK, VK3DL, VK3DM, VK3DN, VK3DO, VK3DP, VK3DQ, VK3DR, VK3DS, VK3DT, VK3DU, VK3DV, VK3DW, VK3DX, VK3DY, VK3DZ, VK3EA, VK3EB, VK3EC, VK3ED, VK3EE, VK3EF, VK3EG, VK3EH, VK3EI, VK3EJ, VK3EK, VK3EL, VK3EM, VK3EN, VK3EO, VK3EP, VK3EQ, VK3ER, VK3ES, VK3ET, VK3EU, VK3EV, VK3EW, VK3EX, VK3EY, VK3EZ, VK3FA, VK3FB, VK3FC, VK3FD, VK3FE, VK3FF, VK3FG, VK3FH, VK3FI, VK3FJ, VK3FK, VK3FL, VK3FM, VK3FN, VK3FO, VK3FP, VK3FQ, VK3FR, VK3FS, VK3FT, VK3FU, VK3FV, VK3FW, VK3FX, VK3FY, VK3FZ, VK3GA, VK3GB, VK3GC, VK3GD, VK3GE, VK3GF, VK3GG, VK3GH, VK3GI, VK3GJ, VK3GK, VK3GL, VK3GM, VK3GN, VK3GO, VK3GP, VK3GQ, VK3GR, VK3GS, VK3GT, VK3GU, VK3GV, VK3GW, VK3GX, VK3GY, VK3GZ, VK3HA, VK3HB, VK3HC, VK3HD, VK3HE, VK3HF, VK3HG, VK3HH, VK3HI, VK3HJ, VK3HK, VK3HL, VK3HM, VK3HN, VK3HO, VK3HP, VK3HQ, VK3HR, VK3HS, VK3HT, VK3HU, VK3HV, VK3HW, VK3HX, VK3HY, VK3HZ, VK3IA, VK3IB, VK3IC, VK3ID, VK3IE, VK3IF, VK3IG, VK3IH, VK3II, VK3IJ, VK3IK, VK3IL, VK3IM, VK3IN, VK3IO, VK3IP, VK3IQ, VK3IR, VK3IS, VK3IT, VK3IU, VK3IV, VK3IW, VK3IX, VK3IY, VK3IZ, VK3JA, VK3JB, VK3JC, VK3JD, VK3JE, VK3JF, VK3JG, VK3JH, VK3JI, VK3JJ, VK3JK, VK3JL, VK3JM, VK3JN, VK3JO, VK3JP, VK3JQ, VK3JR, VK3JS, VK3JT, VK3JU, VK3JV, VK3JW, VK3JX, VK3JY, VK3JZ, VK3KA, VK3KB, VK3KC, VK3KD, VK3KE, VK3KF, VK3KG, VK3KH, VK3KI, VK3KJ, VK3KK, VK3KL, VK3KM, VK3KN, VK3KO, VK3KP, VK3KQ, VK3KR, VK3KS, VK3KT, VK3KU, VK3KV, VK3KW, VK3KX, VK3KY, VK3KZ, VK3LA, VK3LB, VK3LC, VK3LD, VK3LE, VK3LF, VK3LG, VK3LH, VK3LI, VK3LJ, VK3LK, VK3LM, VK3LN, VK3LO, VK3LP, VK3LQ, VK3LR, VK3LS, VK3LT, VK3LU, VK3LV, VK3LW, VK3LX, VK3LY, VK3LZ, VK3MA, VK3MB, VK3MC, VK3MD, VK3ME, VK3MF, VK3MG, VK3MH, VK3MI, VK3MJ, VK3MK, VK3ML, VK3MM, VK3MN, VK3MO, VK3MP, VK3MQ, VK3MR, VK3MS, VK3MT, VK3MU, VK3MV, VK3MW, VK3MX, VK3MY, VK3MZ, VK3NA, VK3NB, VK3NC, VK3ND, VK3NE, VK3NF, VK3NG, VK3NH, VK3NI, VK3NJ, VK3NK, VK3NL, VK3NM, VK3NN, VK3NO, VK3NP, VK3NQ, VK3NR, VK3NS, VK3NT, VK3NU, VK3NV, VK3NW, VK3NX, VK3NY, VK3NZ, VK3OA, VK3OB, VK3OC, VK3OD, VK3OE, VK3OF, VK3OG, VK3OH, VK3OI, VK3OJ, VK3OK, VK3OL, VK3OM, VK3ON, VK3OO, VK3OP, VK3OQ, VK3OR, VK3OS, VK3OT, VK3OU, VK3OV, VK3OW, VK3OX, VK3OY, VK3OZ, VK3PA, VK3PB, VK3PC, VK3PD, VK3PE, VK3PF, VK3PG, VK3PH, VK3PI, VK3PJ, VK3PK, VK3PL, VK3PM, VK3PN, VK3PO, VK3PP, VK3PQ, VK3PR, VK3PS, VK3PT, VK3PU, VK3PV, VK3PW, VK3PX, VK3PY, VK3PZ, VK3QA, VK3QB, VK3QC, VK3QD, VK3QE, VK3QF, VK3QG, VK3QH, VK3QI, VK3QJ, VK3QK, VK3QL, VK3QM, VK3QN, VK3QO, VK3QP, VK3QQ, VK3QR, VK3QS, VK3QT, VK3QU, VK3QV, VK3QW, VK3QX, VK3QY, VK3QZ, VK3RA, VK3RB, VK3RC, VK3RD, VK3RE, VK3RF, VK3RG, VK3RH, VK3RI, VK3RJ, VK3RK, VK3RL, VK3RM, VK3RN, VK3RO, VK3RP, VK3RQ, VK3RR, VK3RS, VK3RT, VK3RU, VK3RV, VK3RW, VK3RX, VK3RY, VK3RZ, VK3SA, VK3SB, VK3SC, VK3SD, VK3SE, VK3SF, VK3SG, VK3SH, VK3SI, VK3SJ, VK3SK, VK3SL, VK3SM, VK3SN, VK3SO, VK3SP, VK3SQ, VK3SR, VK3SS, VK3ST, VK3SU, VK3SV, VK3SW, VK3SX, VK3SY, VK3SZ, VK3TA, VK3TB, VK3TC, VK3TD, VK3TE, VK3TF, VK3TG, VK3TH, VK3TI, VK3TJ, VK3TK, VK3TL, VK3TM, VK3TN, VK3TO, VK3TP, VK3TQ, VK3TR, VK3TS, VK3TT, VK3TU, VK3TV, VK3TW, VK3TX, VK3TY, VK3TZ, VK3UA, VK3UB, VK3UC, VK3UD, VK3UE, VK3UF, VK3UG, VK3UH, VK3UI, VK3UJ, VK3UK, VK3UL, VK3UM, VK3UN, VK3UO, VK3UP, VK3UQ, VK3UR, VK3US, VK3UT, VK3UU, VK3UV, VK3UW, VK3UX, VK3UY, VK3UZ, VK3VA, VK3VB, VK3VC, VK3VD, VK3VE, VK3VF, VK3VG, VK3VH, VK3VI, VK3VJ, VK3VK, VK3VL, VK3VM, VK3VN, VK3VO, VK3VP, VK3VQ, VK3VR, VK3VS, VK3VT, VK3VU, VK3VV, VK3VW, VK3VX, VK3VY, VK3VZ, VK3WA, VK3WB, VK3WC, VK3WD, VK3WE, VK3WF, VK3WG, VK3WH, VK3WI, VK3WJ, VK3WK, VK3WL, VK3WM, VK3WN, VK3WO, VK3WP, VK3WQ, VK3WR, VK3WS, VK3WT, VK3WU, VK3WV, VK3WW, VK3WX, VK3WY, VK3WZ, VK3XA, VK3XB, VK3XC, VK3XD, VK3XE, VK3XF, VK3XG, VK3XH, VK3XI, VK3XJ, VK3XK, VK3XL, VK3XM, VK3XN, VK3XO, VK3XP, VK3XQ, VK3XR, VK3XS, VK3XT, VK3XU, VK3XV, VK3XW, VK3XX, VK3XY, VK3XZ, VK3YA, VK3YB, VK3YC, VK3YD, VK3YE, VK3YF, VK3YG, VK3YH, VK3YI, VK3YJ, VK3YK, VK3YL, VK3YM, VK3YN, VK3YO, VK3YP, VK3YQ, VK3YR, VK3YS, VK3YT, VK3YU, VK3YV, VK3YW, VK3YX, VK3YY, VK3YZ, VK3ZA, VK3ZB, VK3ZC, VK3ZD, VK3ZE, VK3ZF, VK3ZG, VK3ZH, VK3ZI, VK3ZJ, VK3ZK, VK3ZL, VK3ZM, VK3ZN, VK3ZO, VK3ZP, VK3ZQ, VK3ZR, VK3ZS, VK3ZT, VK3ZU, VK3ZV, VK3ZW, VK3ZX, VK3ZY, VK3ZZ, VK3AA, VK3AB, VK3AC, VK3AD, VK3AE, VK3AF, VK3AG, VK3AH, VK3AI, VK3AJ, VK3AK, VK3AL, VK3AM, VK3AN, VK3AO, VK3AP, VK3AQ, VK3AR, VK3AS, VK3AT, VK3AU, VK3AV, VK3AW, VK3AX, VK3AY, VK3AZ, VK3BA, VK3BB, VK3BC, VK3BD, VK3BE, VK3BF, VK3BG, VK3BH, VK3BI, VK3BJ, VK3BK, VK3BL, VK3BM, VK3BN, VK3BO, VK3BP, VK3BQ, VK3BR, VK3BS, VK3BT, VK3BU, VK3BV, VK3BW, VK3BX, VK3BY, VK3BZ, VK3CA, VK3CB, VK3CC, VK3CD, VK3CE, VK3CF, VK3CG, VK3CH, VK3CI, VK3CJ, VK3CK, VK3CL, VK3CM, 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at a Southern Malles township and very keen to hear last minute broadcast on recent disposals. Connected up the Type A and clamped on the cans only to be greeted with a solid whack of electrical interference! i.e. mains! I muttered and promptly started up the bus and headed out of town. At half mile distance, level of interference was undiminished so moved to 2 miles but trouble was just as bad. You see fellows, it's hard to get far from the electric clock on the dashboard when the receiver is sitting on the front seat—wouldn't it. Anyhow 31K's f.b. signal on 80 pushed through R5, so I was happy.

3AGF is well again after bout in hospital and is on receiver rebuild, Mark 7, or is it 8 Tom? Noel 3ATG, ex-UG, should have "Clapp" v.f.o. humming 'ere you read this and as I believe his power supplies are ready, should hit the ether very soon. 3GZ, after a successful month working DX on 20, has been on 40 phone; Max has a 6J6 for a really hot group, and when his RC45 materials, the receiver will need bolting down and how!

311 still not progressed from the antenna raising stage, too had as much of time is taken up on local p.a. work Charles OB. 3ACY is punching out a nice sig on 40 and is a really f.b. operator with good business-like flat, "Clapp" v.f.o. used here. Code practice class got off to a good start here with five keen students of the art. Bad weather has caused attendance to suffer these past two weeks, but your scribe has no doubt that they will all be into it again now that the rain has passed.

CENTRAL WESTERN ZONE

3AKP's pet tree was chopped down last week, so Keith will soon have to start digging and getting the pole-crow lined up, 30 odd feet of tree is almost sure to be weighty, however it will be very nice when erected.

A scratch disposals round-up went off very nicely this time, our good friend John, being in Melbourne, offered to pick up for the boys. Time was short, but some hectic staff work lined things up and John came home with a high percentage of catches. John, by the way, besides deserving our thanks, also merits our congratulations, as he has put his foot on the first step towards married bliss (better start training her early, John).

3A1KM is now busy looking over the inside of a RA10FA receiver and command transmitter, both nice jobs Bob and should work out OK. 3AKW is

also delving into an RA10FA, there must be something good about these jobs for them to be so popular. 3GN is heard more often these days on 40 and 80, and is brewing a n.b.f.m. lay-out for the 35 Mc. rig. 3HD is also examining a TUS unit, just what Allan intends to do with it we don't know, but guess it will have to wait until after cropping.

3TY is very noticeable by his absence these days, must be all work and no play. 3AGB is another elusive one, heard you on 20 one day Pete, and also on 40 occasionally, Pete seems to be interested in 50 Mc. converters, and their various and many spots. 3DP is collecting cathode-ray tubes and now has his second VR139A, so Jim will soon be able to not only hear his pleasant voice, but also what it looks like also. 3AKP is another of the look and hear boys. Keith got some most original patterns until it was discovered the tube was crook. Zone book-up on Sunday, 10th—1120 Kc. at 10 a.m.

EASTERN ZONE

The results of the Eastern Zone Portable Contest are to hand, and we wish to thank 318 for checking the logs after XQZ had sorted them all out. 31A was 1st with 114 points; 3VL 2nd, 110 points; 3WE 3rd, 106 points; 3RH, 98 points; 3TH, 96 points; 3ALS, 76 points; 3LV, 67 points; 3GZ, 52 points.

3ALA is to be congratulated for his fine effort. Ted is quite new to the game, yet he handled his gear like a veteran. 3DI operated as a portable station on the Sunday afternoon, gaining 56 points but did not submit his log as a competitive station.

The last month has been an inactive one again, mainly due to an influx of new cars to the Zone, plus the after-effects of the Contest. 38S has been ordered a holiday from Ham Radio, so Keith is busy erecting some more sheds in his back yard. We hope you are soon fit again, Keith. 3DI has been running in his new car with visits to Ilana, including a trip to 3VL/US. 3TH is motoring through the Oneco district on a fishing holiday, complete with a portable permit. We did hear you one Sunday, Gordon, but could not come on the air. 3PR also had a holiday in the city. Ron is very pleased with the way his new 8 S meter is working in his receiver.

3CL went out portable in the V.H.P. Field Day, with a quad for 6 metres that works better backwards. Syd reported one QSO only, with 3ACL, though he had 6 and 2 metre gear with him. We are pleased to welcome 3AST, at Lindenow, to the

Zone. Hope you find VK3 as good as VK2, OM! How about joining our book-ups on 2650 Kc. every Sunday night at 2000 hours?

3ANG is building a new all band 11 tube re-tuning, incorporating plug-in coils, back-to-back i.f.s. and all mod. cones. 3GZ is still busy on his estate. Graham is country controller, and will carry out his duties with his usual efficiency. 3WE has migrated to the lounge for the winter, but has 3TV sorted his audio out. 3VL/US are inactive, being in the throes of house-building, and chopping down trees, ready for their new business.

NORTH EASTERN ZONE

Your scribe is sorry for lack of notes lately, but 3AGB has been inactive, and as nobody sent dope no notes. 3ANG is looking forward to the election on July to get out of this job. 3U1 and 3TV went for a walk on a recent Saturday afternoon, returning about ten past six. It is not known whether they were celebrating something, or drowning their sorrow over disposals' ballet. 3U1 has changed to parallel 807's final on six now. Allan's latest YL is Barbara Baker, 8021 Holy Cross, Los Angeles 45, California. Anyone wishing to cut him out, write to above address, or QSO W6RAL on ten phone. Allan also seems to go out (to the library, he says) a lot about 8 p.m.

3AFP so engrossed in radio he is forgetting messages. Peter has excellent phase modulation going on all bands, and a 30 watt modulator will be for sale soon. A new converter for ten is now going well. Although a chemist, Peter believes in whisky for

3KR heard on forty with improved modulation from Class B 807's. Ken was trying to get little paper QSL's, with gallons on them. 3TV is improving now, and we hope is right by next Convention. 3ACK heard on 40 with excellent signal. 3HZ has moved QTH next door to 3AFP. 3CN still starts a phone venal v.v. fight whenever he needs a phone Ham. 3ACW working on twenty at present, but is re-building, v.f.o. and QRO (sensible chap). 3FD still not on the air, but bought more gear.

3KR wishes to stand for secretary again so please support him in the elections. He has been an ideal secretary, and would be impossible to replace. 3U1 enjoys being president, and as he has had only six months, he should be supported for another term. We know he is a poor president, but we could do worse. It would be a good idea to make the president correspondent also, as at present he has nothing to do.

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st notes were written, two Council general meetings have been held. The council meeting held on the 13th May. Squadron Leader A. Walz (14W) Officer-in-charge of the R.A.A.F. Re-Mr. P. Kelly (4KB) was appointed in collaboration with Mr. J. Moyle (2JU) new Federal Constitution. Owing to business, which included a report presented by our Delegate 42U, the adjourned to a later date. The adjourned was held on 24th May. The amount associated at this meeting was so great that it lasted over three hours.

meeting was held as usual on the 1st month. In the absence of the occupied the chair. The DX C.C. 4BC. The meeting then discussed report on Convention and items for consideration. A lengthy discussion of the cost of "Amateur Radio" took place and it was decided that this Division could increase cost, and members would pay the extra themselves. Division of next discussed and the outcome of discussion was that VK4 declined item. The formation of a Technical Committee is, and a ballot for post- committee is to be taken.

Membership of this Division at A. Wals (4AW), A. Couper (4BW), Gibson and Mr. L. J. Feenaghty. Two members are still active in Hams. 4AW the v.h.f. band, whilst grand old 4BW still takes a very lively interest in radio and we understand, occasionally work on 7 Mc. with the far northern information to hand recently, we are surprised if 4BW is once again looking for the boys down south. Some old-timers will remember the work done by 4BW in the cyclone of 1927. Incidentally, as one of the first to hold an expedition in Australia, his call sign in 1914

(4GH).—A club has been formed with 4GH as President, and 4AI as

424Ras moved to a new QTH up on the 3.5 Mc. band. 41N exchanges on 14 and 28 Mc. now that beam up. Barry recently had the teching C.S.I.R. technicians making kites in Gypsic. 4CR on a big receive and puts out a terrific phone signal. Col. 41N using automatic control and peak limiting. 41N in phase, but striking trouble with kites. 4HD going to town on 28 Mc. a pirate on 14 Mc. who not only stations, but uses 4HD's name. What are you Max? Early in June between 5 hours Max heard a station just like the one that unfortunately it was the only fact that could be gleaned from a station signing PXN-.

—We understand that a club has been organized in Ipswich, but to date we have not been able to appointing one of your number to be in contact with information each month so that we can put more news into these notes? 4LT is active on 7 Mc. band and putting out a map. Albert was the first VK4 488 on the 7 Mc. band. 4LT is now on the P.M.G. to shift telephone wires so that we can get up the famous LT vertical.

Townsville Zone (4GD).—Very little activity in this zone during the past month, have heard 4EJ and 4FC on the bands occasionally. Say fellows, what about opening up your hearts and giving 4GD some dope on your activities? Len keeps weekly saked with the sub-editor so make good use of him if you want to see more notes under the heading of Townsville Zone.

Well, here we are again, fit and well, fairly itching to write and write, but unfortunately there is nothing to write about. Due to a new editorial policy beginning this issue, all copy must be in VK3 no later than the eighth of the month, and if it is any later than that, it will not be published. This of course cramps my style for this month very badly, as I can't cover the meeting (which is never held as early in the month as the eighth) nor can I write anything about the city chaps, as it is at the meeting I get most of my information.

Everybody was glad to see George Luxon (5RX) get his DX C.C. Certificate at the last meeting. Quist and unobtrusive, George can be heard on 14 Mc. at all odd times and always seems to get his man. Big thing about him is that he is no "airhog," he doesn't grab that elusive station and put a stranglehold on it for hours, but passes it around, and is always anxious to tip anyone off that some new DX station is around. Here's more power to your wrist George.

I have received some very bad news this past week, up to now I have been the only wireless genius in my large and expensive family, but this week the P.M.G.'s Department dealt me a slap in the face by announcing that in some strange and unaccountable way my brother-in-law possessed sufficient intelligence to be granted an A.O.C.P. It's bad enough to have your brother-in-law getting a ticket, but when he is also your best friend, well I ask you. His name is John, and he is a very nice fellow, but he has no call sign, although I think he is getting around to biting me for the necessary "quid." I have installed large and expensive locks on all the doors and windows of my shack, but they don't call him in for a license. Joke aside, folks, welcome to Amateur Radio.

That young and handsome looking Associate member, Robert Turner (whom you will remember I made join the W.I.A. before he could step over the kitchen doormat to see my daughter) has rejoined the R.A.A.F. and is stationed at Laverton at present. He has just been paid his first pay cheque. He has not yet paid up his subs for this year, but remember young man, you will have to get my consent one day, and one of my conditions before I say yes will be a complete pay-up of all outstanding subscriptions. I will be glad to see you and your daughter. My daughter has been interjecting whilst I was writing this and I have taken time out to give her a shipping with barbed wire. - (You've got the right idea "W.I.A." - the second "W" is for worker - I mean "W.I.A. - Worker in Australia" and a batchelor might be interested. - Editor).

As "Pansy" would say when he reads this, "the little bird" has been busy again—but it's too good to let pass. One MPS spends his Easter each year

At the time of writing *5KU* is on holidays and has been putting in some solid DX work on 40 metres. He has been very busy with his building and has now started a "Clapp" v.f.o. Building and building seems to be the order of the day around the South East area and *6JA* has been putting in some DX work on 40 metres. *6AKS* as first r.f., 1852 as second r.f., and has been getting extra results on 28 Mc. 5MR has just been awarded a 1000 watt licence. He heard to good effect on 20 metre phone. 5TW is also a good one who has built a "Clapp" v.f.o. and joins the ever-growing ranks of enthusiastic and satisfied builders. He has been working on 20 metre phone, and 20 and no b.c.l. complaints either, how do you do it Claudi! The new rig is well under way too. *6JG* has been working on a new shack and a new house (QTH) etc. how well he is doing. *6JG* and they say that the vegetables are growing that much that the cabbage stalks can be used as a base for the shack. *6JG* v.f.o. Thanks again for the notes. *OM* you sure saved my life this month. Well folks I have been in the DX world for 10 months, ah yes, he slipping back, well, ah yes, he slipping back, and as they say on ten metres, "I am going to *Moya Moya*" gawd knows what that means, but

The May meeting was held on the 17th (third Tuesday as usual); 43 members being present. VK6SWs was admitted as a member—his VK6 call sign is on the way. 6MO was down town from Waterloo, came along to the meeting and gave us the once over.

6GM read his report on the Easter Convention. One of the items which interests us all is relative to "Amateur Radio." Steps have already been taken to get the publication to VK6 earlier in the month, and we will find dope on the tonospheric predictions, contest rules, etc., well beforehand so that they will be of more value to us, particularly in VK6 where the average date of arrival of "A.R." is 15th of the month. 6GM presented us well at the Convention, and most details of his good work have been given through VRSW.

6RU, with QSL activities well in mind, told of his recent trip to VK2 and visits he made to a couple of shacks. Although our QSL Bureau fees are slightly higher, the daily service which is available, and the efficient despatch of our cards more than makes up for the additional cost.

6DD, representing our Contest Committee, announced the winners of the Emergency Network Contest held on Easter Saturday. 6MG romped home in the "miles-per-watt" section using a portable rig with an input of 0.45 watts! 6KU worked three bands with portable equipment and obtained the highest portable score. 6WT got the home-station section. Prizes and pennants will be given to them at a later date.

It was discussed that action should be taken to endeavour to have VK6 listed as a separate country. Our Council now have the matter in hand and we will be hearing more of it later.

6FC gave us latest information on the progress of the Emergency Net and done on 50 Mc. activity.

The meeting closed after the auction of some useful gear which had come from the re-building of 6WI. Bidding was keen and the sale was most successful.

Once again these notes are being written with the aid of a hurricane lamp. Phil's power house just hasn't been the same since GGD put up a nice tower with a 1.6 meter beam. Horrie has been working the DX. We hear that GRK has gone East. Let's know when you get going over there Bob. Another to leave us is 6VB who is now a W6B. Radio gear is plentiful up there according to Dave, so what about letting us hear some of it even if we can't get it.

Yet another personality departing our shores is 6MX who is going home to California. Milo's home call is W6DPM and all his W6 gear is ready for use just as soon as he gets into the shack. We'll be looking for you on 14 Mc. c.w. Milo.

Noticed 6WS at our last meeting—hadn't seen Skipper about for quite some time. 6NL has been listening to dreams of 6JW's new receiver. Val is not saying much, but we think he will soon be building a new one himself. Also with the new

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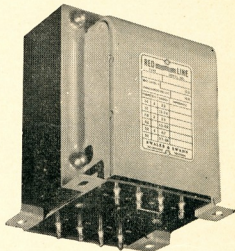
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